“Lock Picking Made Easy”

An illustrated guide by:

Tony More

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“Warning”

Lock Picking should only be performed on locks that you own or have permission to pick, always obtain written permission to pick a lock for someone else and ask for Identification, the information found on this book is very valuable, do not disclose it to just anyone, please use strong discretion when using your newly acquired lock picking skills. The author and its affiliates do not hold any responsibility for the misuse of this book or its contents.

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Chapter #1: A Brief History of Locks and Lock Picking

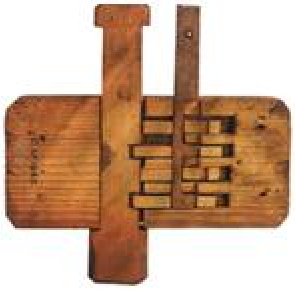
Ever since humankind started gathering things that were intended to be kept for themselves and no one else, there have been those intent on stealing those thing from their rightful owners, thus creating the need to secure these items from thieves.

Before locks were invented there were other type of locking mechanism used for hundreds of years, cords of rope and twine were used to “ lock” doors and other things in place much like locks are used today, intricate knots were developed for this purpose, making the knotted rope a famous symbol of security, as an example there was the Gordian Knot a knot so elaborated that it was said that only the man destined to conquer Asia could untie, tied by Gordius, King of Phrygia that secured the yolk to the shaft of his chariot.

Gordian knot

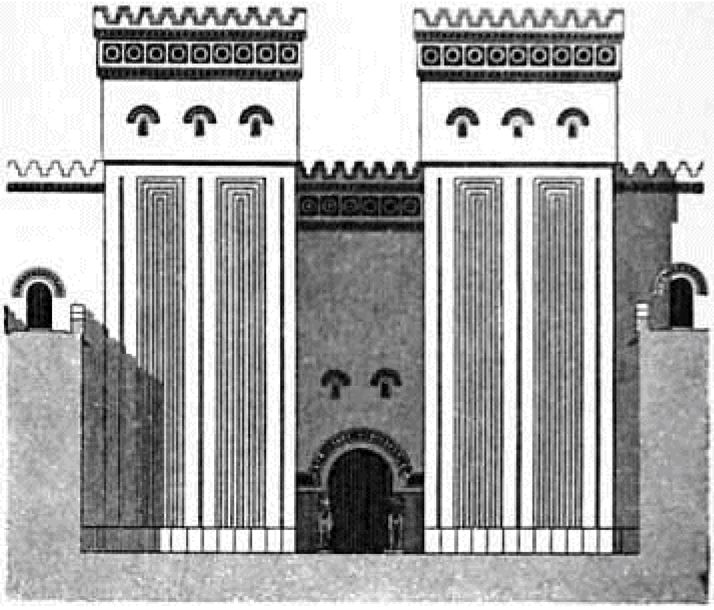
When Alexander the Great as conqueror failed to undo the Gordian knot he cut it swiftly with his sword making this event one of the first known acts of lock picking.

The fist mechanical locks were made out of wood; records show them in use 4,000 years ago in Egypt.

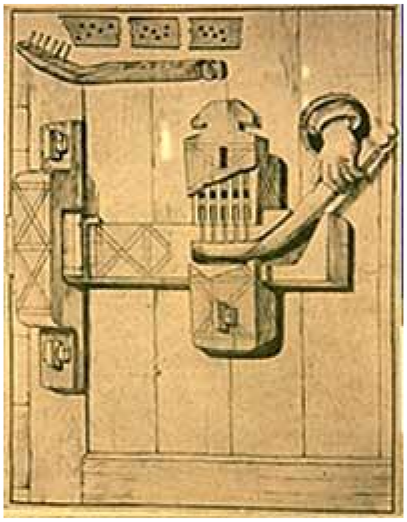


Ancient Egyptian Lock.

The first tangible wooden lock was discovered in Persia as Khorsabad in the security gate in the palace of Sargon II who reigned from 705 to 722 BC.



Palace of Sargon II, Khorsabad, Persia In appearance and operation this lock was similar to this wooden cane- tumble lock.



Wooden Cane tumbler Lock
The pegs at the bit end of the key correspond to the bars, or the tumblers, in the bolt. When inserted, the pegs lifted the tumblers so that the bolt could be retracted and the door or gate could be opened, this method of locking was the ancestor of the modern pin tumbler locks.

It wasn’t until the years 870 and 900 that the first all metal locks were crafted in England, they were simple bolts made of iron with obstructions fitted around the keyholes to prevent tampering, these were the forerunners of the modern Warded Locks and they were based on a design first introduced by the Romans who devised obstructions to “ward off” the entry or turning of the wrong key.

Ancient Warded Locks

Modern

Warded Lock
Vintage Padlock

Lock Picking became an art in the 18th century and lock makers had to develop increasingly complicated locking mechanisms to curtail the efforts of would be thieves, they developed keys with changeable bits, locks with curtain closed-out around keyholes, alarms combined with the action of the bolt and puzzle padlocks(the forerunners of the combination lock).

In America between 1774 and 1920 American lock makers patented about 3,000 varieties of locking devises, among those patents there was one developed by Linus Yale Sr which was a modification of an old Egyptian pin- tumbler principle that utilized a revolving cylinder.

In the early 1920’s Walter Schlage advanced the concept of cylindrical pin-tumbler locks by placing a push button locking mechanism between the two knobs.

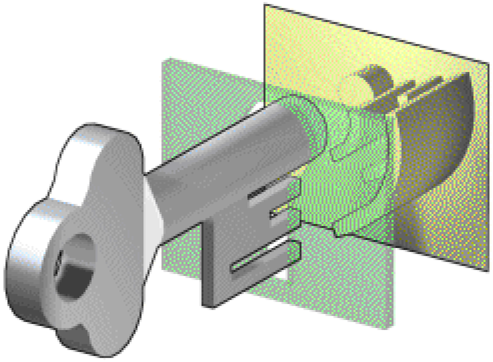
Chapter # 2 Different Locks and Mechanisms

The Warded Lock:

The warded lock is one of the oldest lock designs still in use today, it is thought to have been developed in China and spread to Europe during the middle Ages.

In elementary warded locks, a set of obstructions would block the rotation of any key not designed for that lock, they may have one simple ward, or many complicated wards with bends and complex protrusions but the principle remains the same, unless the key's shape corresponds to the wards in the lock, it will hit an obstruction and will not turn at all.

When a correct key is inserted inside the lock, it will clear the wards and rotate about the center post, then it will strike a lever activating a latch or sliding bolt to open the lock.



Warded Lock function
The key enters the lock thru a keyhole, and when the key if fully inserted a cavity in the tip of the key fits over a cylindrical post inside the lock. This provides a pivot point, about which the key can rotate,

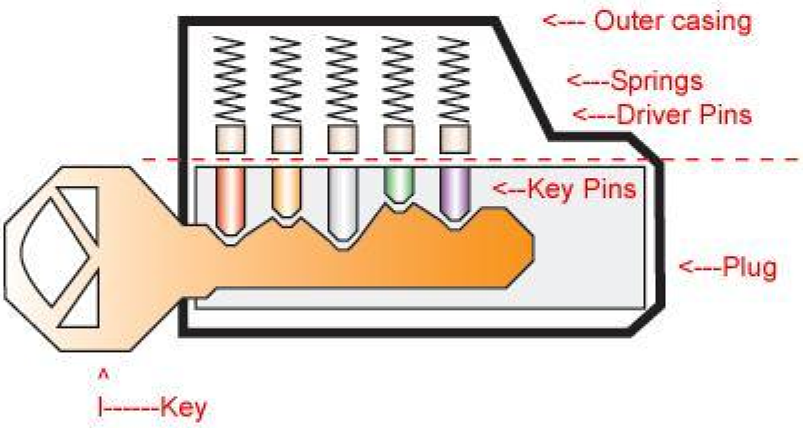
Te notches in the key align with the obstructions or wards allowing it to rotate freely, thus the key will activate a lever or sliding bolt to open the lock.

The pin tumbler Lock:
The pin tumbler lock is the one that is most commonly used in residential and commercial cylinder locks.

In a pin tumbler lock an outer casing has a cylindrical hole in which the plug is housed and in order to open the lock, the plug must rotate inside the hole.

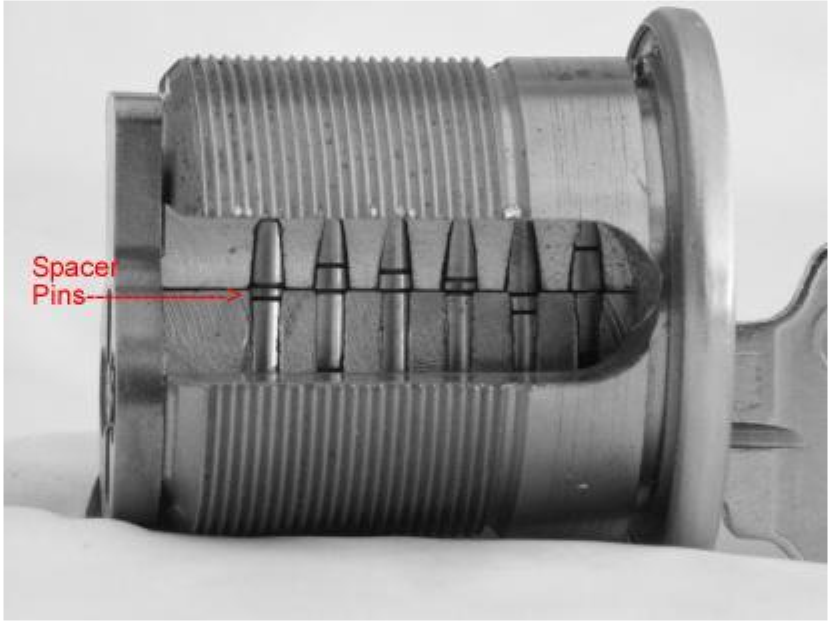
The plug has a slot at one end known as the keyway which allows the key to enter it and at the other end the plug may have a cam or lever that activates a mechanism to retract the bolt in order to open the lock. A series of holes are placed vertically in the plug which contain key pins of various lengths, there may be five or six holes containing pins and these are rounded to permit the key to slide over them easily.

Above each key pin is a corresponding set of spring-loaded driver pins. The outer casing has several vertical shafts, which holds the spring loaded pins.



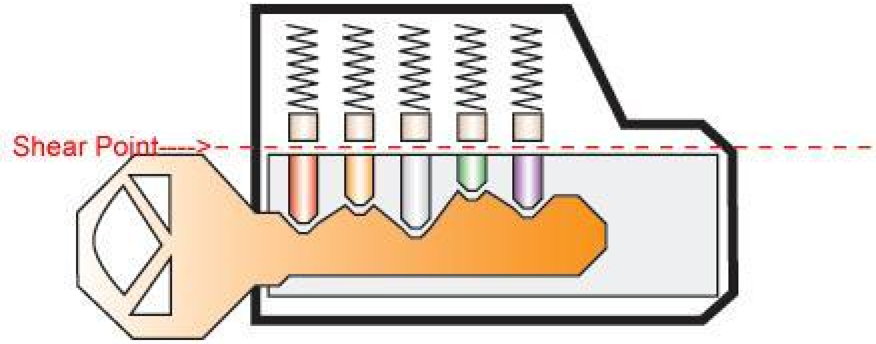
Inside view of pin tumbler locks

Simpler locks typically have only one driver pin for each key pin, but locks requiring multi-keyed entry such as a group of locks having a master key, may have extra driver pins known as spacer pins.



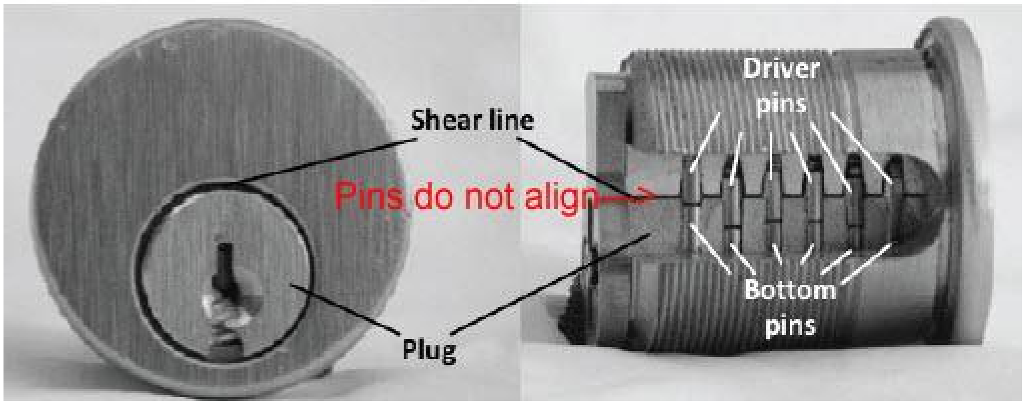
Master Keyed Lock

When the plug and outer assembly are put together, the pins are pushed down into the plug by the springs. The point where the plug and cylinder meet is called the shear point. When the correct key is inserted in the lock, the pins will rise causing them to align precisely at the shear point. This will allow the plug to rotate, opening the lock



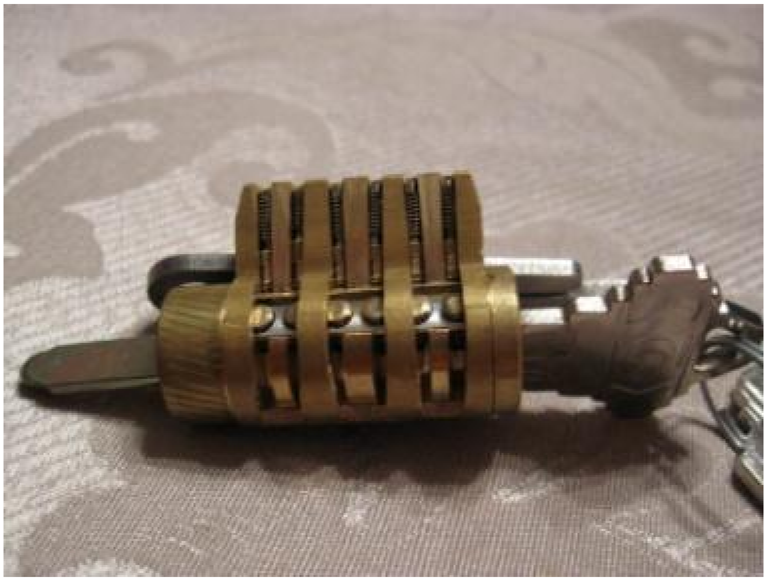
Lock with a proper key inserted

When the key is not in the lock, or an incorrect is inserted in the keyway, the pins do not align with the shear point which prevents the plug from rotating.



Lock with no key inserted

Sets of locks with two sets of keys that open it like a master key will have two sets of shear points. One set is identical to the other locks in the set and one set of shear points is unique to that specific lock.



Lock with a Dual Shear line

The Padlock:

Padlocks were known early in time to the Greeks, Romans, Egyptians, and the Chinese; it was first used as a travel lock to protect merchandise from thieves along ancient trade routes where commerce was centered, some were small and some were of tremendous proportions, they were made of iron, bronze or brass and were rugged in construction.

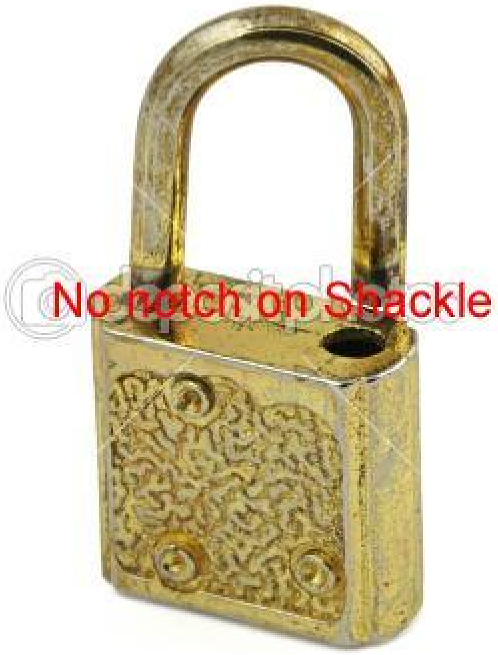
Early Padlocks

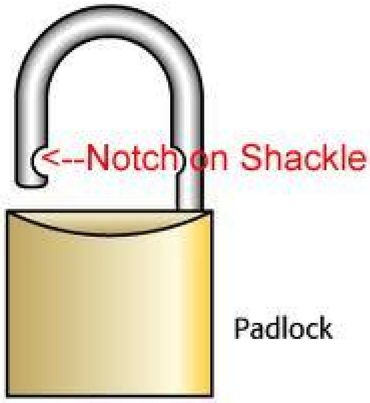
A padlock is composed of a body, shackle and locking mechanism.

The shackle is typically shaped as a “U”, round or squared at cross-section and generally swings away or slide out of the padlock body when in the unlocked position.

The older padlocks were equipped with integrated locking mechanisms and their design did not allow disassembly and they used rotating disks or lever tumblers where a portion of the bolt that secures the shackle enters the tumblers when a correct key is turned on the lock.

The more modern modular locking mechanisms do not directly employ the tumblers to lock the shackle; they have a plug within the cylinder that with the correct key inserted turns and allows a locking dog to retract from notches cut into the shackle.





Integrated Locking Mechanism Padlock
Modular Locking Mechanism Padlock

Padlocks with modular locking mechanisms can often be taken apart to change the tumblers or to service the lock, they usually employ pin, wafer and disk tumblers and are automatic, or self locking not requiring a key to lock the padlock.

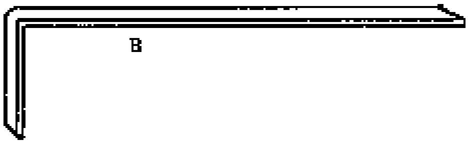
Chapter # 3

Tools and Equipment of the Locksmith.
The Tension or Torque Wrench:

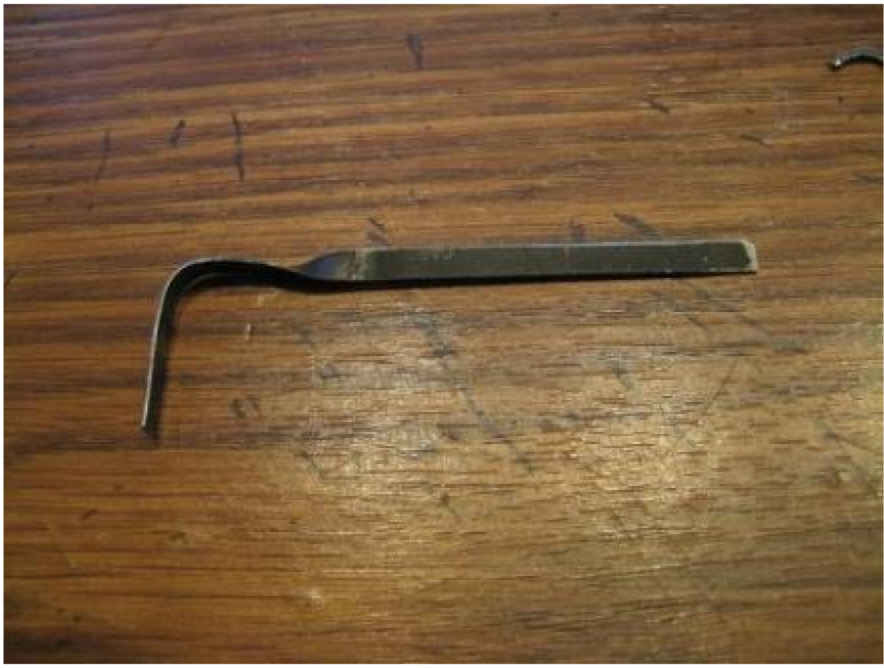
A tension or Torque Wrench is an "L" shaped tool used in picking locks by applying torsion or pressure to the inner cylinder of a lock to hold any picked pins in place while the other pins are shifted and then after all pins have been picked it is used to to turn the inner cylinder and open the lock like a key.

Despite its name this tool provides torsion not tension, tension stretches something while torsion twists something.

Some torsion wrenches are called "Feather Touch" and are coiled into a spring at the bend in the "L" which helps the user to apply constant torque.

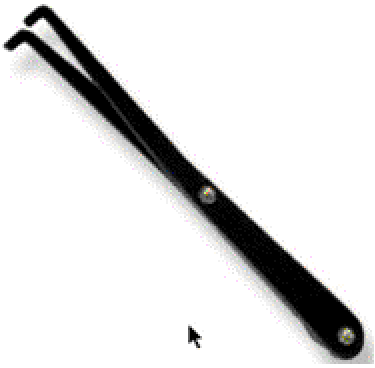


Basic Torsion Wrench



Feather touch

Torsion Wrench

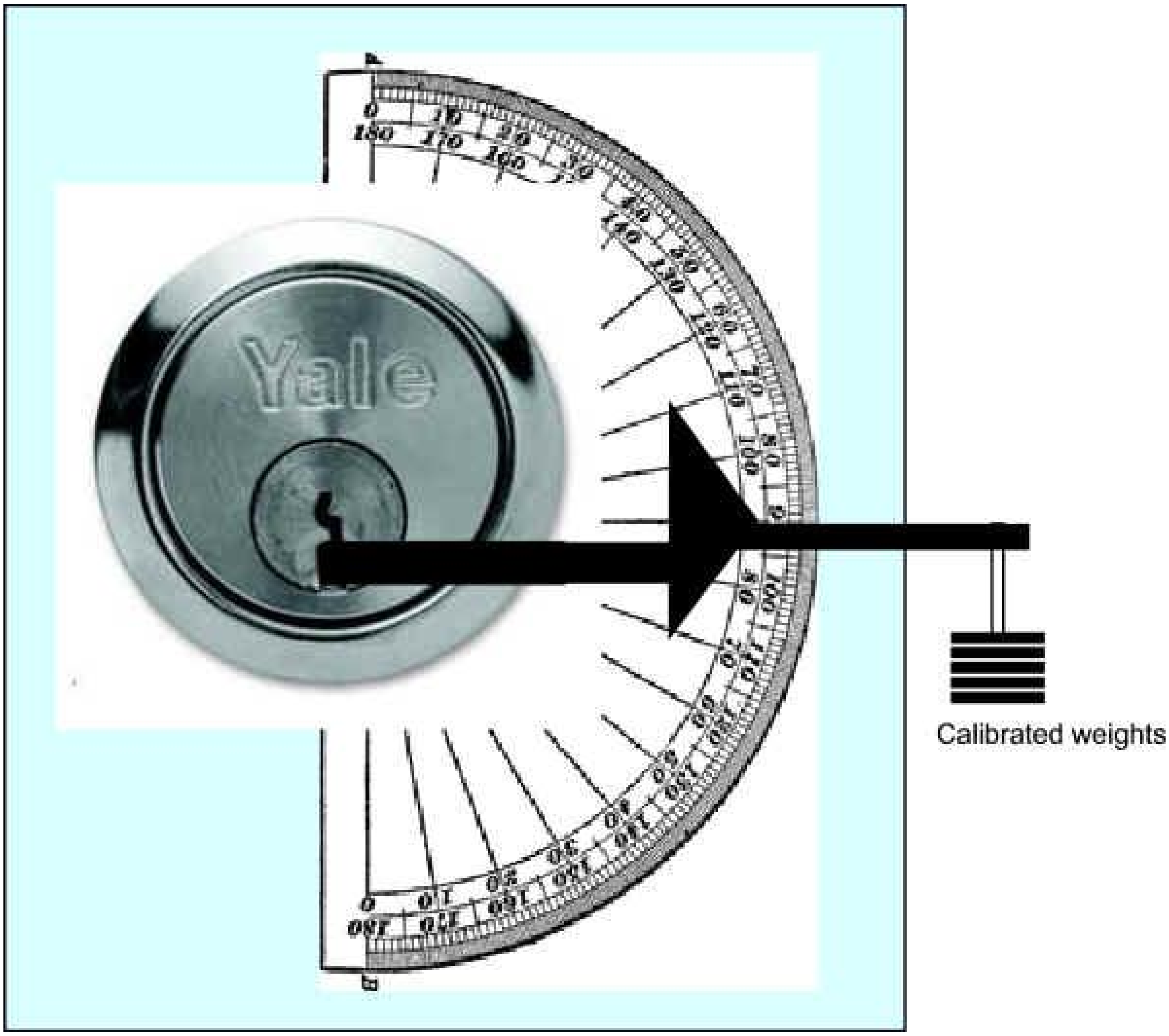


Forked Torsion Wrench

A variety of Torsion Wrenches

The forked Torsion wrench resembles a pair of twisters used in cars allows the user to apply torsion to both the top and the bottom of the lock and is commonly used with double sided wafer locks.

Some High tech torsion tools sit over the lock allowing the user to see a display of the amount of pressure applied, this aids with the process of feeling when a pick has set.

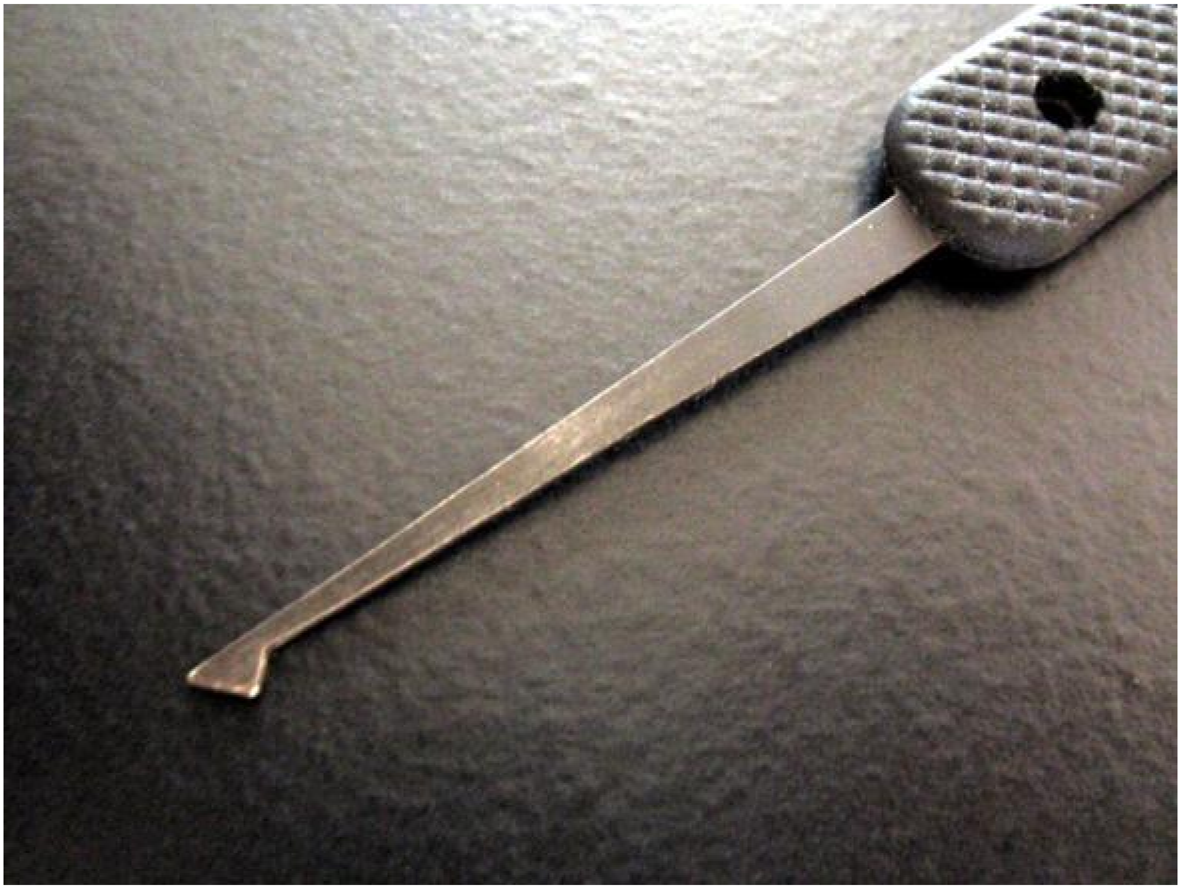


High Tech Torsion Wrench

The Torsion tool is just as important as the lock picks, it is not possible to pick a pin/tumbler or wafer lock without one even with the use of a pick gun.

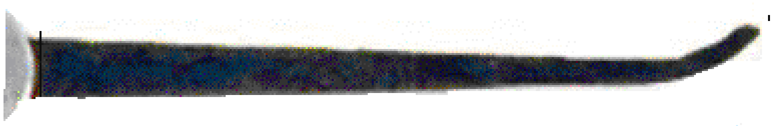
The Half- Diamond Pick:

One of the most basic and common picks is used to pick individual pins, but it can also be used for raking and for wafer and disk locks.



Half- Diamond or Feeler Pick The Hook Pick:

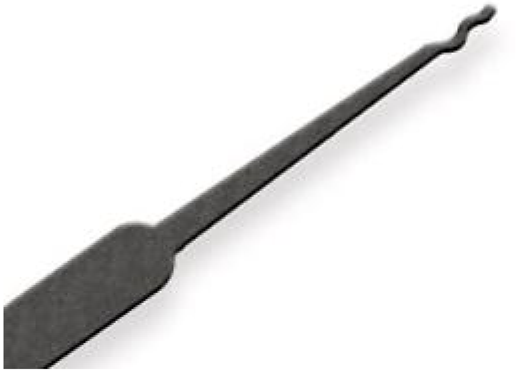
It is similar to the half-diamond pick but has a hook tip rather than a half-diamond shape, it is sometimes called a feeler pick and it is not used for raking but it is used to feel each individual pin to be raised to the shear line.



Hook Pick
The Rake Pick:

These picks such as the common snake pick are designed to “rake” pins by rapidly sliding the pick past all the pins repeatedly, in order to bounce the pins until they reach the shear line.

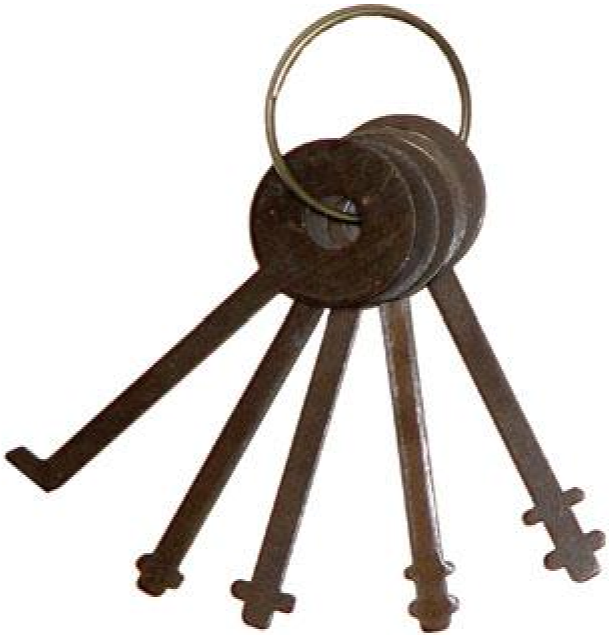
This method is the easiest and generally works well on less expensive locks. When the pins are exited they bounce all around the shear line and with the skillful use of torsion wrench is the easiest way to pick a lock.



Snake Rake Pick

Warded Lock Picks:

The warded pick, also known as a skeleton key and is used for opening warded locks and are made to conform to a generalized key shape to allow for internal manipulations, These picks can also be used to “rip” the lock by placing the pick at the back of the lock and pulling it out in a fast sharp ripping action.

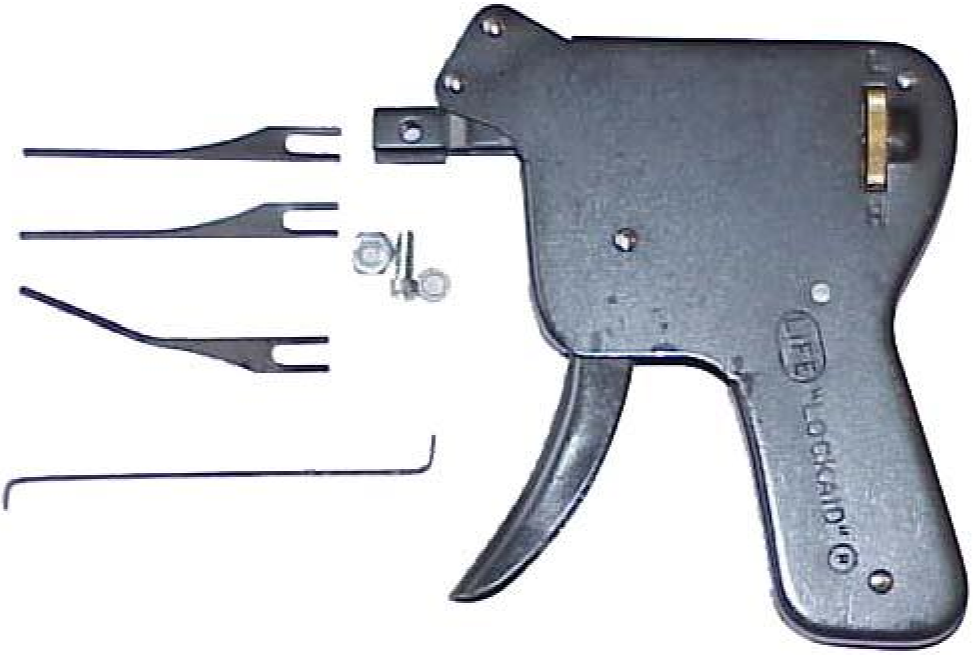


Set of Warded Lock Picks

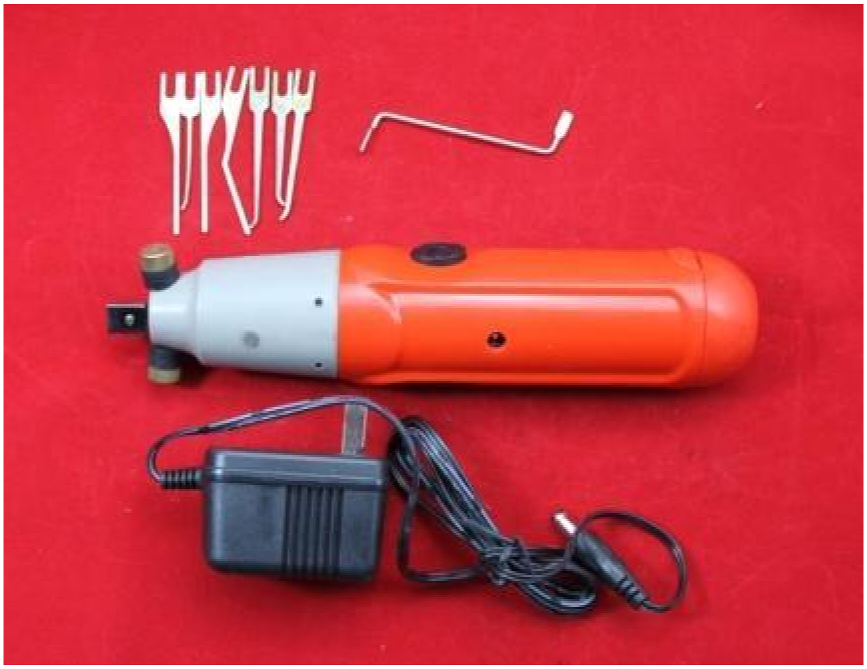
The Pick Gun:

The Pick Gun is used by pulling the trigger and it operates on the same principle as Newton’s Cradle, they transfer sudden upwards energy to the bottom pins which communicates this to the top pins causing those pins to jump simultaneously, The pick gun is always used in combination with a torsion wrench and the only requirement to open the lock is learning the timing of the snap.

There are also electric pick guns available that by simply pressing a button that causes the guns pick to vibrate and in conjunction with the torsion wrench being used causes the pins to set at the shear line.



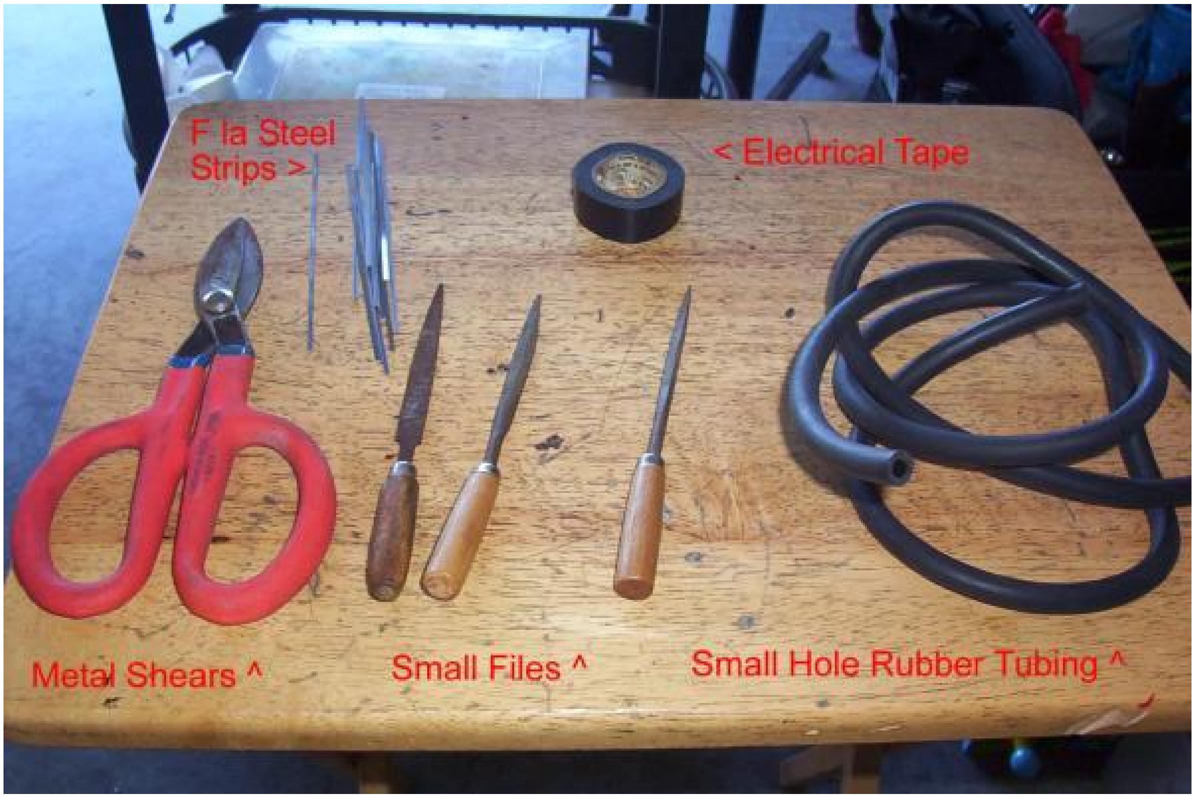
Manual Pick Gun



Electric Pick Gun

Chapter # 4

How to make your own lock picks and tension wrenches. Tools and supplies needed to make your picks and wrenches:

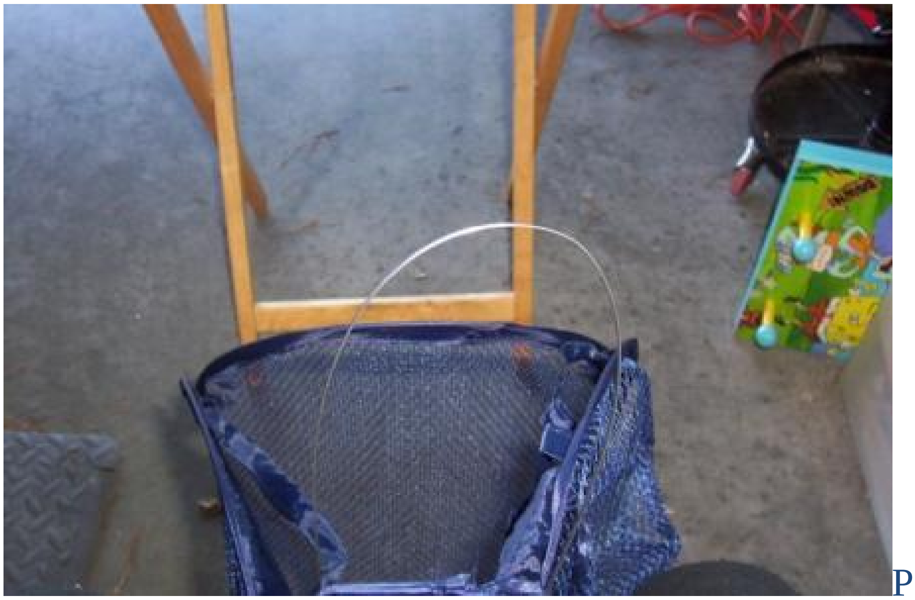


You will need:
#1. Flat Steel Strips.
#2. Electrical Tape.
#3. Metal Shears.

#6. Bench Vise (optional)

#7. Bench Grinder (optional) #8. Rubber Cement or Glue #4. A variety of Small Metal Files. #9. Needle nose pliers #5. Small Hole Rubber Tubing

The metal Sheers, the Small files, rubber cement, needle nose pliers and Electrical Tape can be obtained inexpensibly at your local hardware store, a bench vise and bench grinder can be expensive, if you have them use them if not opt for the less expensive table method for filing and use the small files. For the Flat Steel Strips you can go to your local dollar store and purchase a Folding Hamper as pictured below for the mere amount of one dollar and remove the flat steel rods that hold it together and cut it with the metal shears into 6 inch strips.



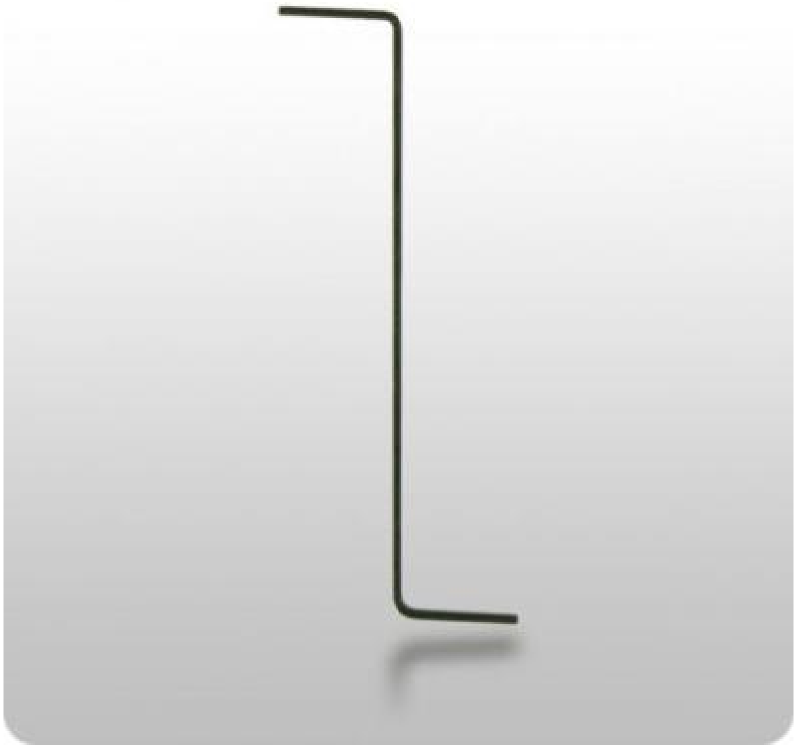
Pop Up Hamper Open Hamper Take out Flat Steel Rods

Measure 6 inches

Cut rod into 6 Inch Strips One Pop up Hamper will yield enough flat steel strips to make several sets of picks and tension wrenches.

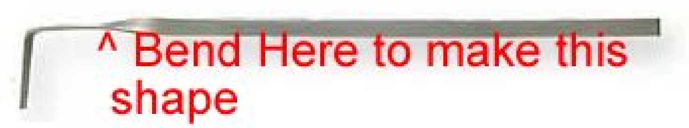
Making the Tension Wrenches:

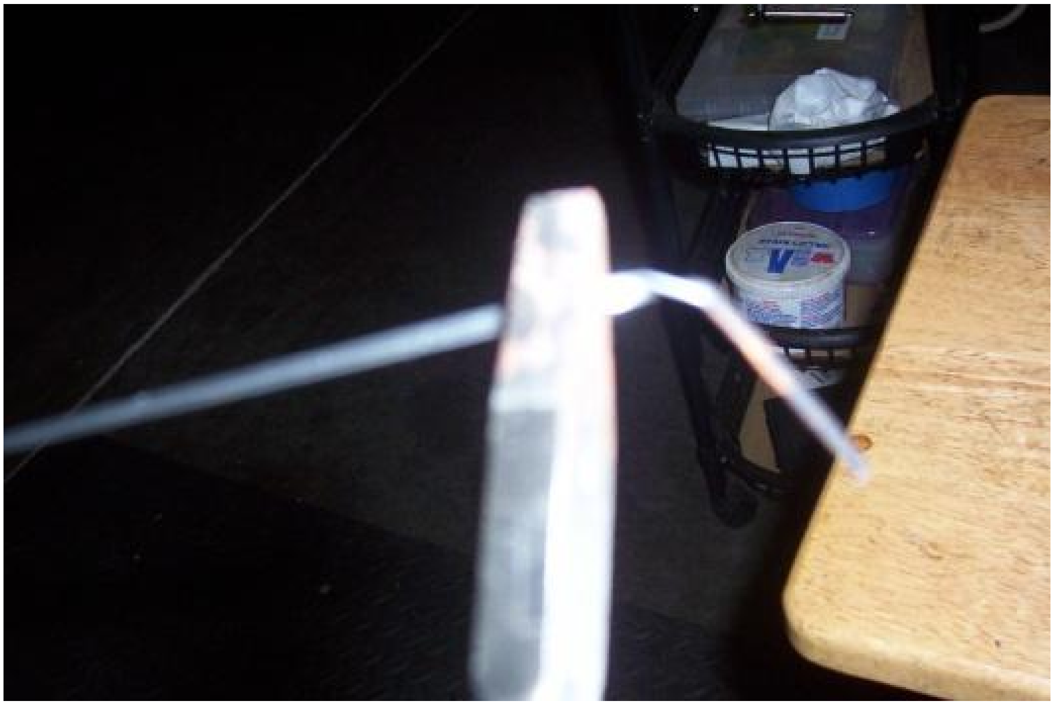
To make a simple "L" shaped tension wrench you simply take one of the 6 inch steel strips and bend it into an "L" shape with the needle nose pliers as pictured below.



Simple Double ended Tension Wrench.

To make a Feather Touch Tension Wrench you must twist the steel strip at the base of the “L” shape to form a spring as pictured below.

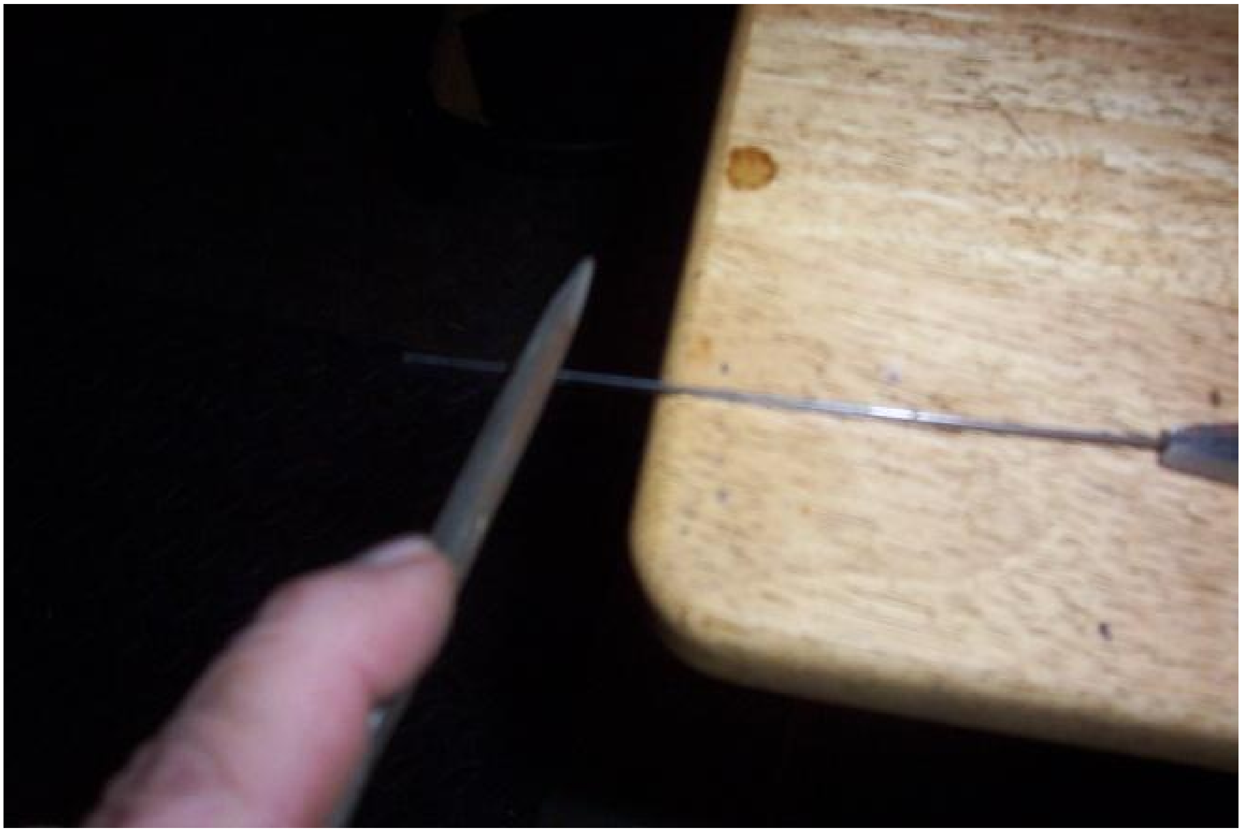




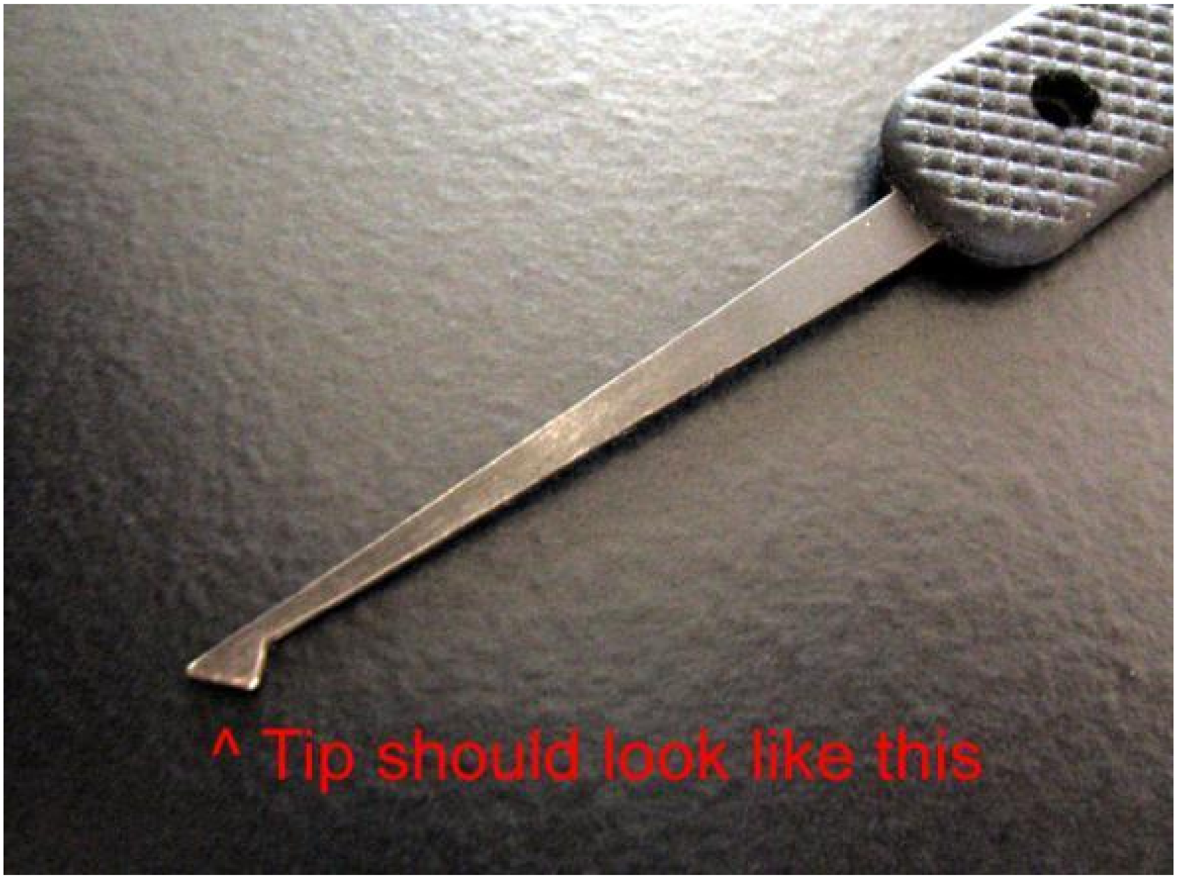
Masking the Half- Diamond Pick:

To make the half-diamond pick place a flat steel strip on your bench vice or use your pliers to hold the strip.

Filing on Vice



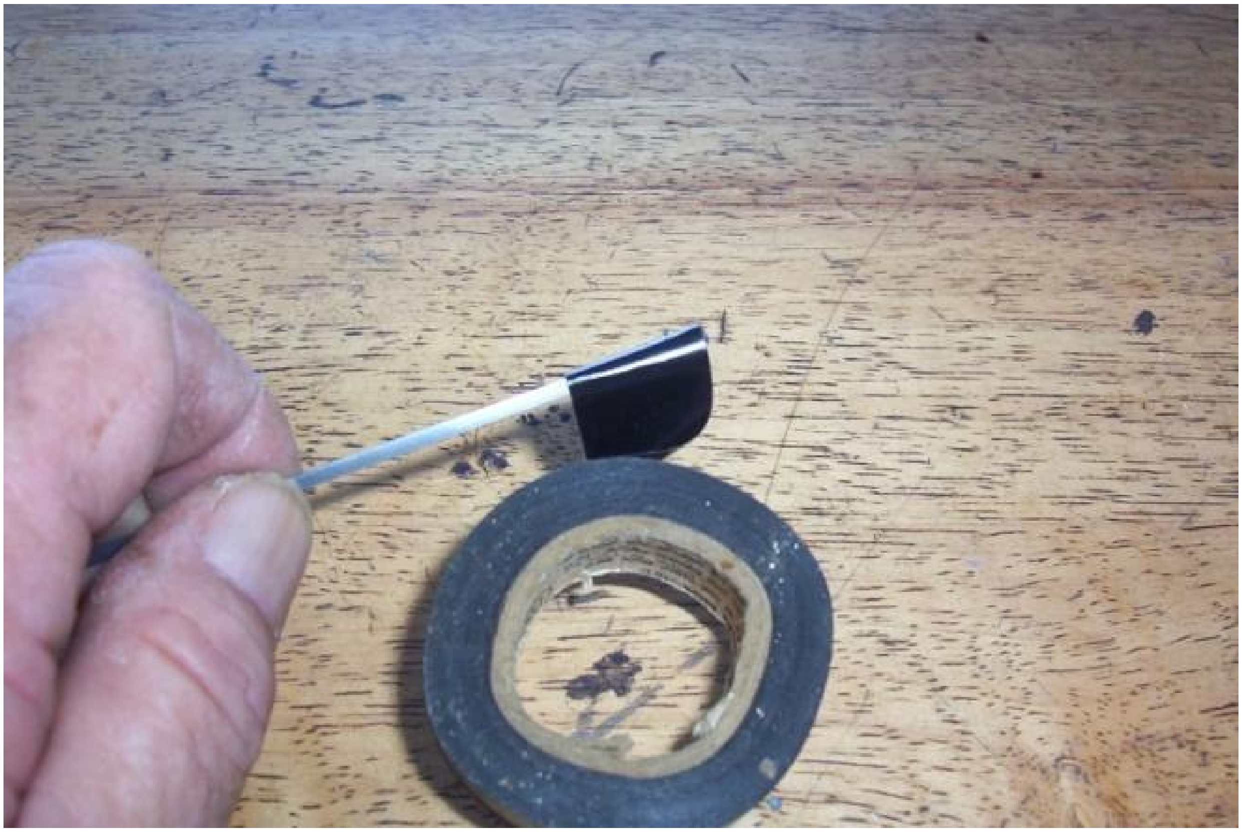
Filing on Table
The filed tip should look like the tip on this pick.



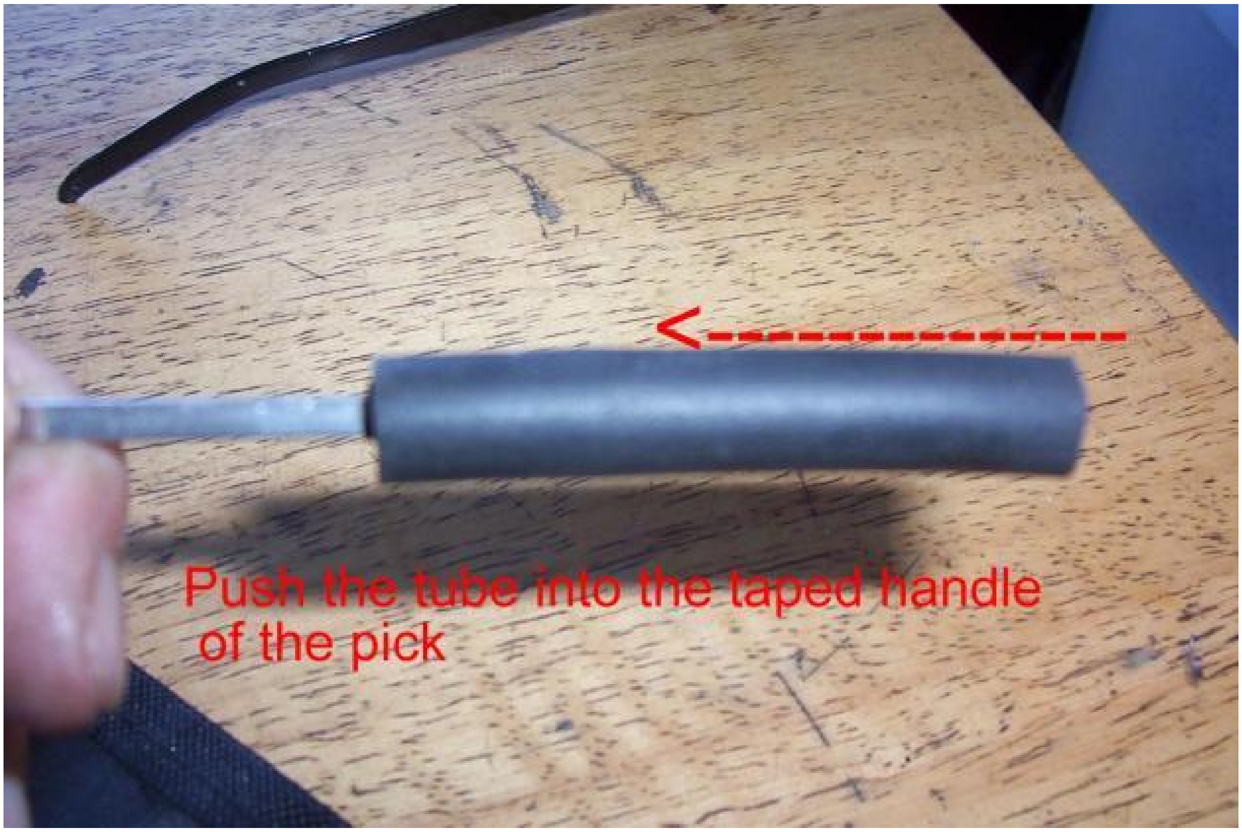
^ Tip should look like this

Now to make the handle for the pick, cut 3 inches of the small hole rubber tubing and apply electric tape to the handle end of the pick you just made.

Cut 3 inches of tubing



wrap the handle with tape Then cover the taped area with the rubber cement or glue and insert the 3 inch tube over the glue and tape.

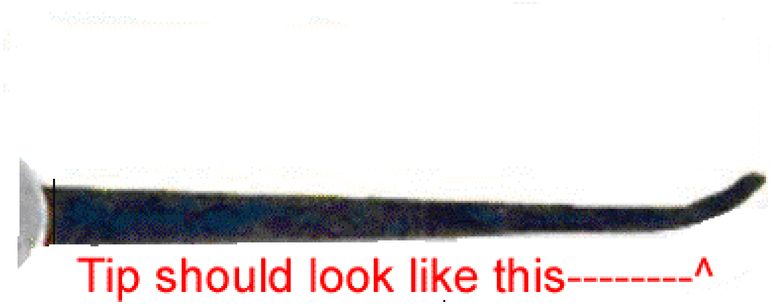


Pushing the Tube

Making the Hook Pick:

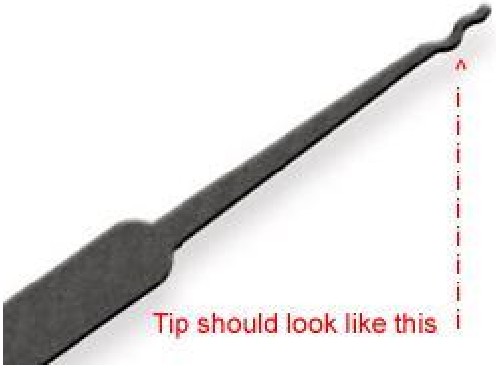
Tube is 3 inches into the handle

Follow the same procedure that you used for the half – diamond pick but the results should look something like the picks depicted below.



Hook Tip

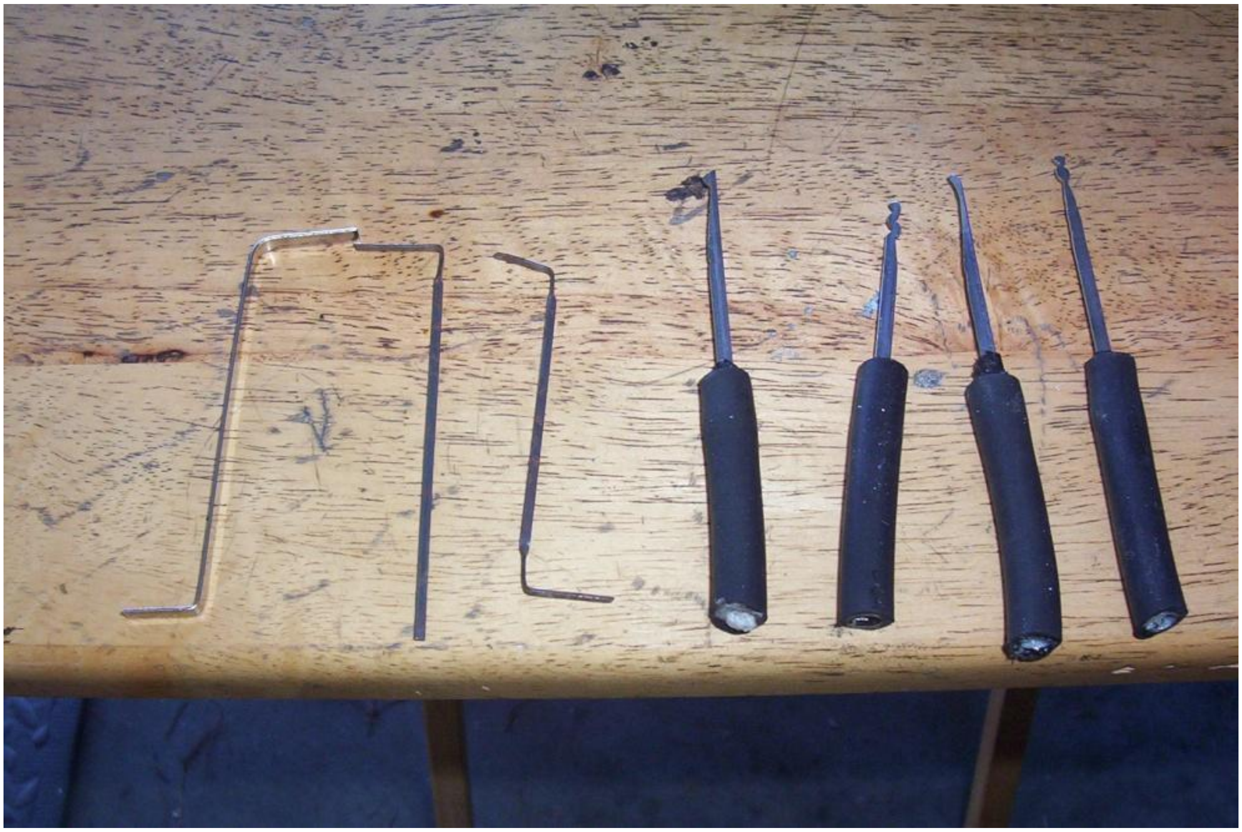
Making the Snake Rake pick:
Follow the same procedure but results should look like this:



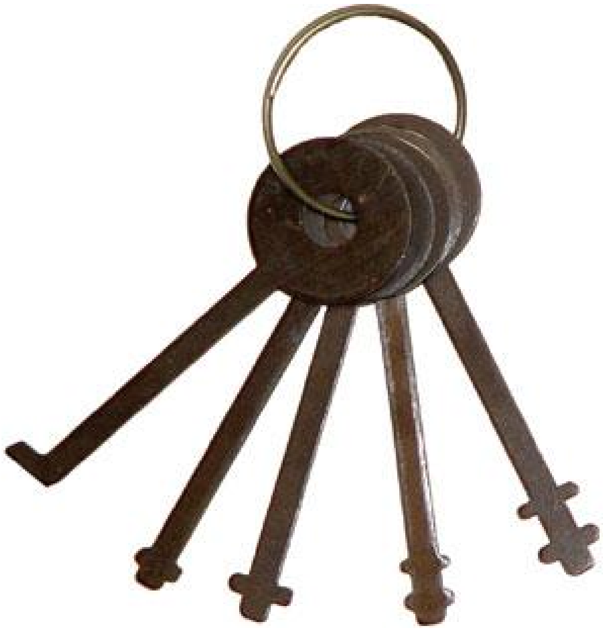
Snake Rake Tip

There is one more pick that is seldom used, and that is the Rounded rake pick.

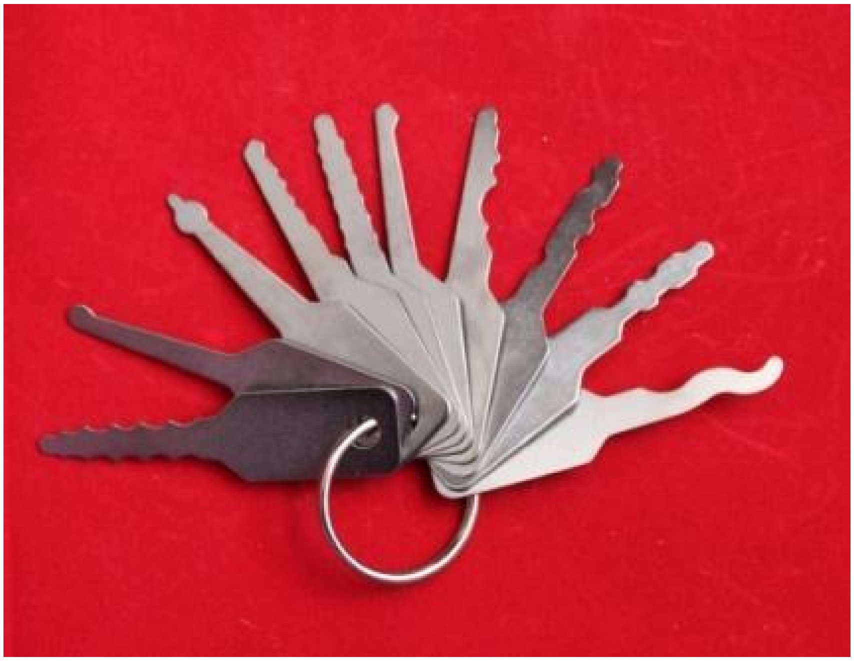
Rounded Rake Pick Here are all of the finished picks and wrenches.



To make warded lock picks you will need to cut out these shapes out of a heavy sheet of steel.



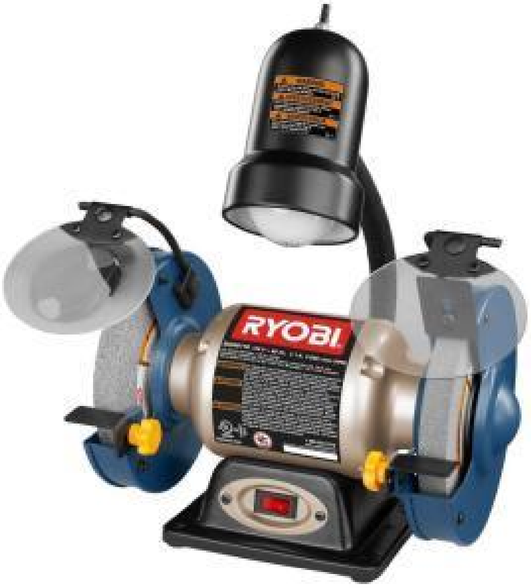
Also there is another tool that you can make out of heavy steel, these are Automotive Try-out keys.



We will explain how to use these keys in the next chapter.
Note: Making the tools depicted using the hand file method can be a tedious job it will take patience and elbow grease in order to achieve the shape desired for each tool.

A bench grinder can expedite the job and make the job easier but they are expensive, prices range from $100.00 and up.

If you have a bench grinder, or can borrow one from someone, use it, if not have patience and if your first tool does not come out right, try again, the pop up hamper gave you enough steel strips that you can afford to make mistakes and still have materials.



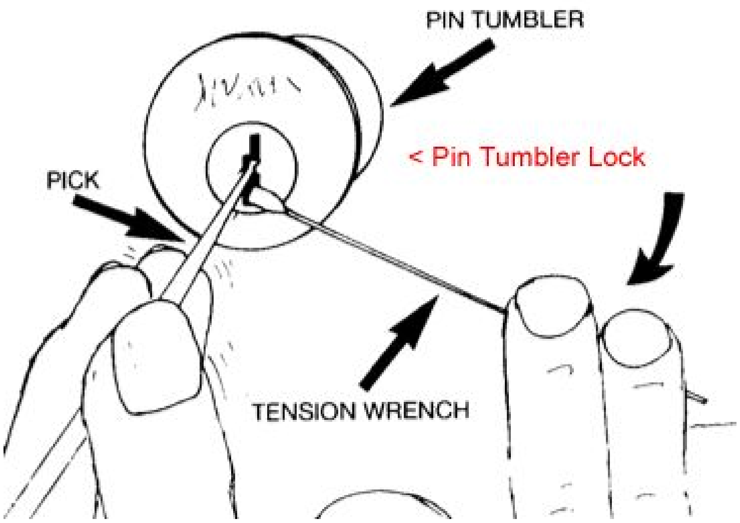
Bench Grinder

Chapter #5. Different Methods for opening locked doors.

Picking the pin tumbler Lock:

Most pin tumbler locks have four or five pins and that includes most padlocks that are not the combination type, deadbolts, doorknob locks and cars.

The pin tumbler lock is the most common lock that you will find, they are used on homes, businesses, schools and many other places. These locks offer the best security for the price but since they are priced relatively low they are quite easy to pick.

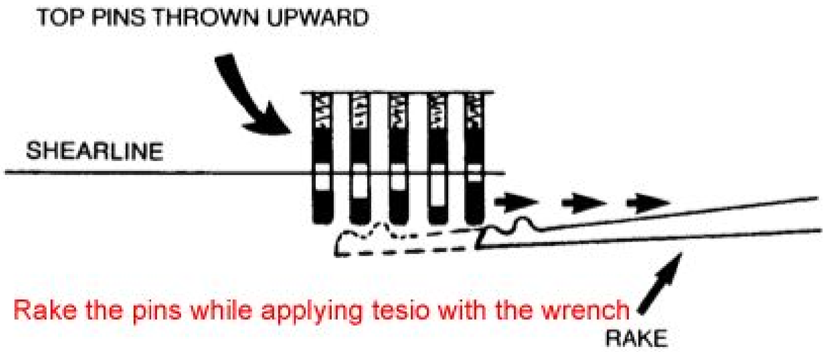


Pick and tension wrench working together to pick the lock To pick the pin tumbler lock you just have to put the pins at the shear point one by one. When one pin reaches the shear line when you push it with a pick while applying tension with the torsion wrench, the plug rotates slightly, just enough for it to squeeze the driving pin between the plug and the shaft pinching it so that when you release your pick, the driving pin will stay in the shaft and out of the plug, providing you maintain the tension

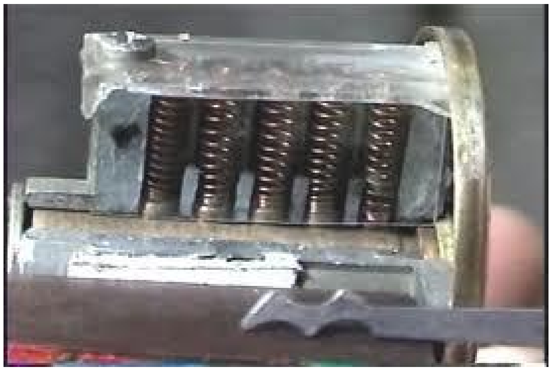
with the wrench at all times. Do this with each pin and the plug will rotate, the driving pins will stay in the shaft, and the key pins will drop down to the lowest point in the plug once your pick is removed, then slowly release the tension and turn the torsion wrench to unlock the door.

The Raking Method:

As we mentioned before raking is the easiest and fastest way to pick a lock.



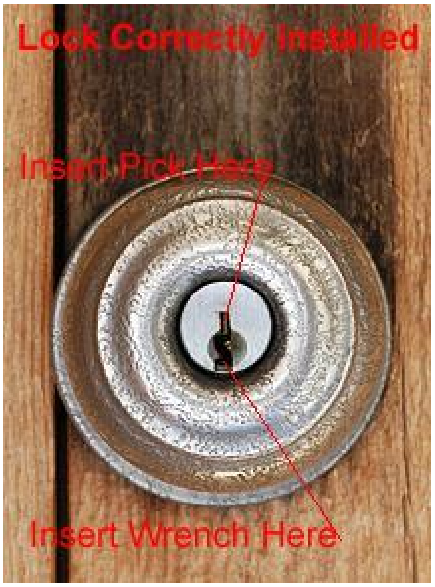
Rake the pins while applying tesio with the wrench



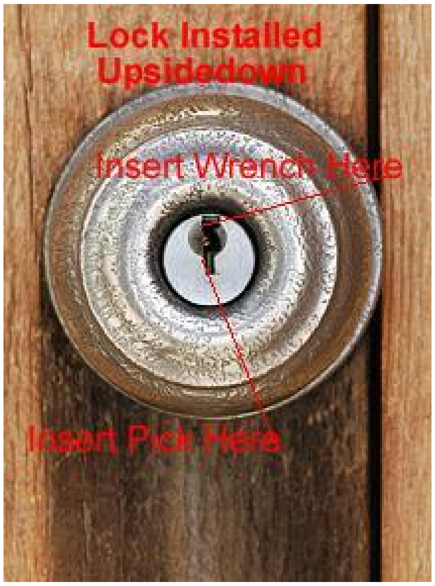
Raking the pins
Insert the Snake Rake Pick all the way to the back of the plug and while applying tension with the wrench, rake the pins rapidly in an outward motion. Do this repeatedly until all the top pins are thrown upward and all of the key pins drop down to the lowest point in the plug, **then slowly release the tension and turn the torsion wrench to unlock the door.**

Note: there are two factors that are important if you are to successfully pick the lock.

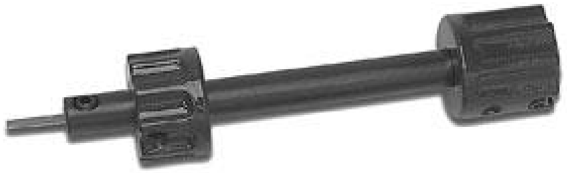
1. Make sure of the location of the pins before you begin to pick the lock, normally the pins are located on the upper part of the plug therefore your pick will be inserted near the top and the tension wrench at the bottom of the plug but sometimes for some reason, locks are installed upside down, this changes in the way that you must use your tools, now you must insert your pick at the bottom of the plug and the tension wrench on top.



< Right (Side) Wrong>



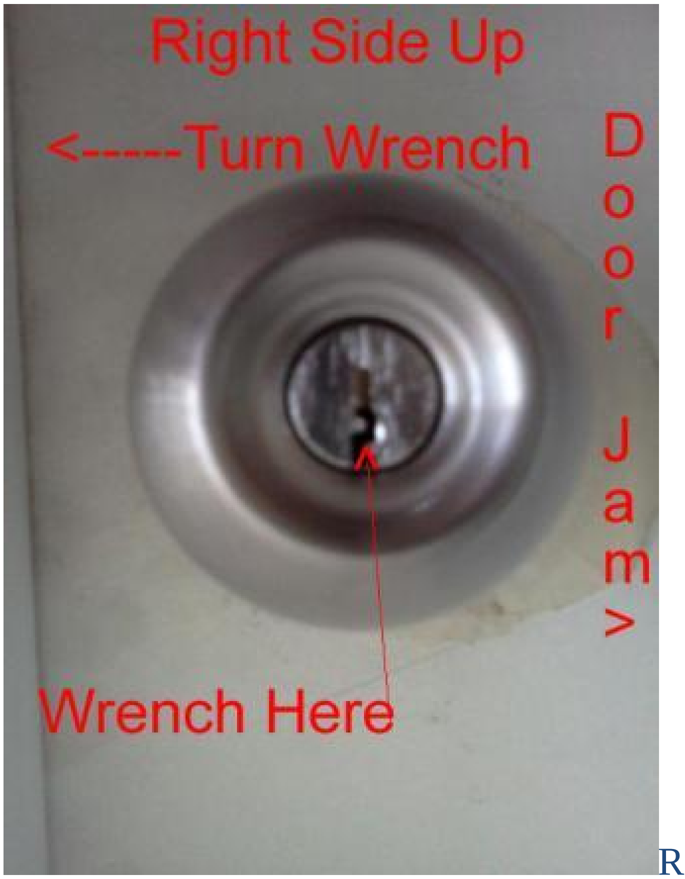
2. It is important to know which way to turn the tension wrench in order to open the lock once you have it picked, turning the wrench in the wrong direction will not open the lock but it will reset the pins and you will have to pick the lock all over again unless you use a special tool called a plug spinner.



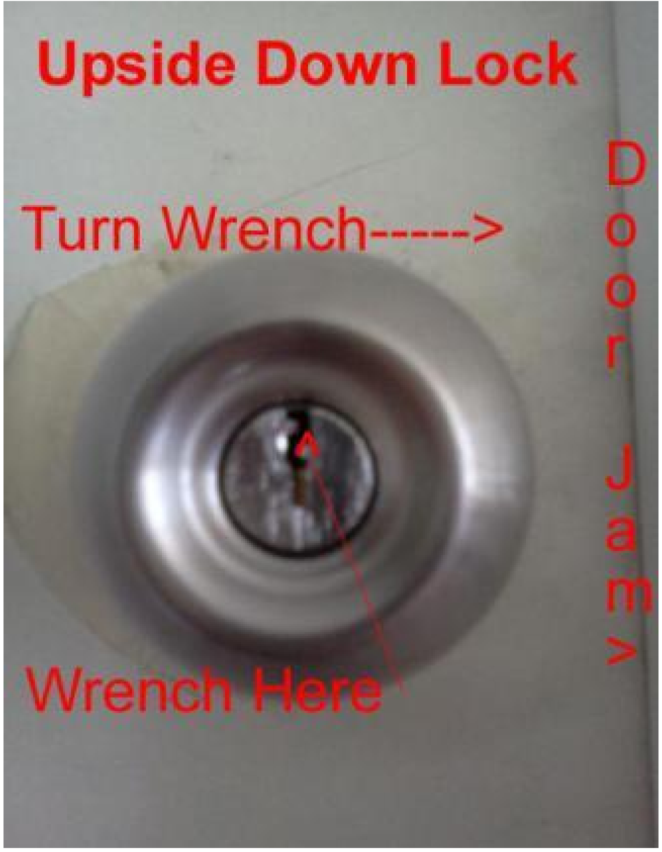
Plug Spinner

A plug Spinner uses a spring that is set to spin in the desired direction very rapidly that the plug bypasses the shear line to open the lock.

Generally a normally installed lock will open when the plug is turned in the opposite direction of the door jam, doing this will retract the bolt from the plate of the door jam.



Right Side up



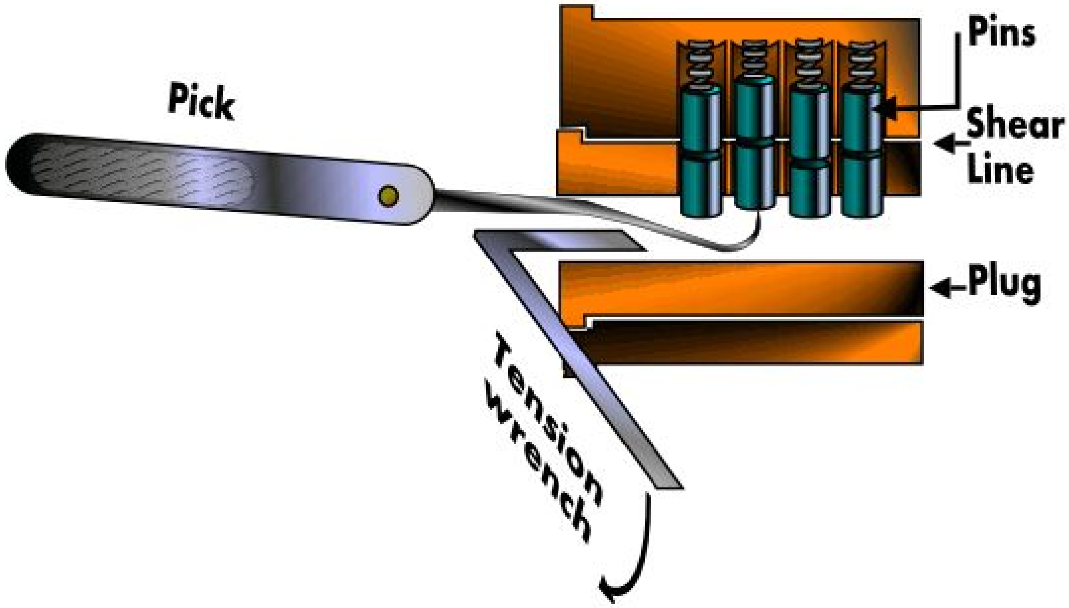
Turn away from door Jam
Upside Down
Turn towards door Jam

When a lock is installed Upside Down lock will open when the plug is turned towards the door Jam. Doing this will retract the bolt from the plate of the door Jam.

The Feel Method:

The feel method is slightly more complex than the raking method because it takes patience to feel each pin.

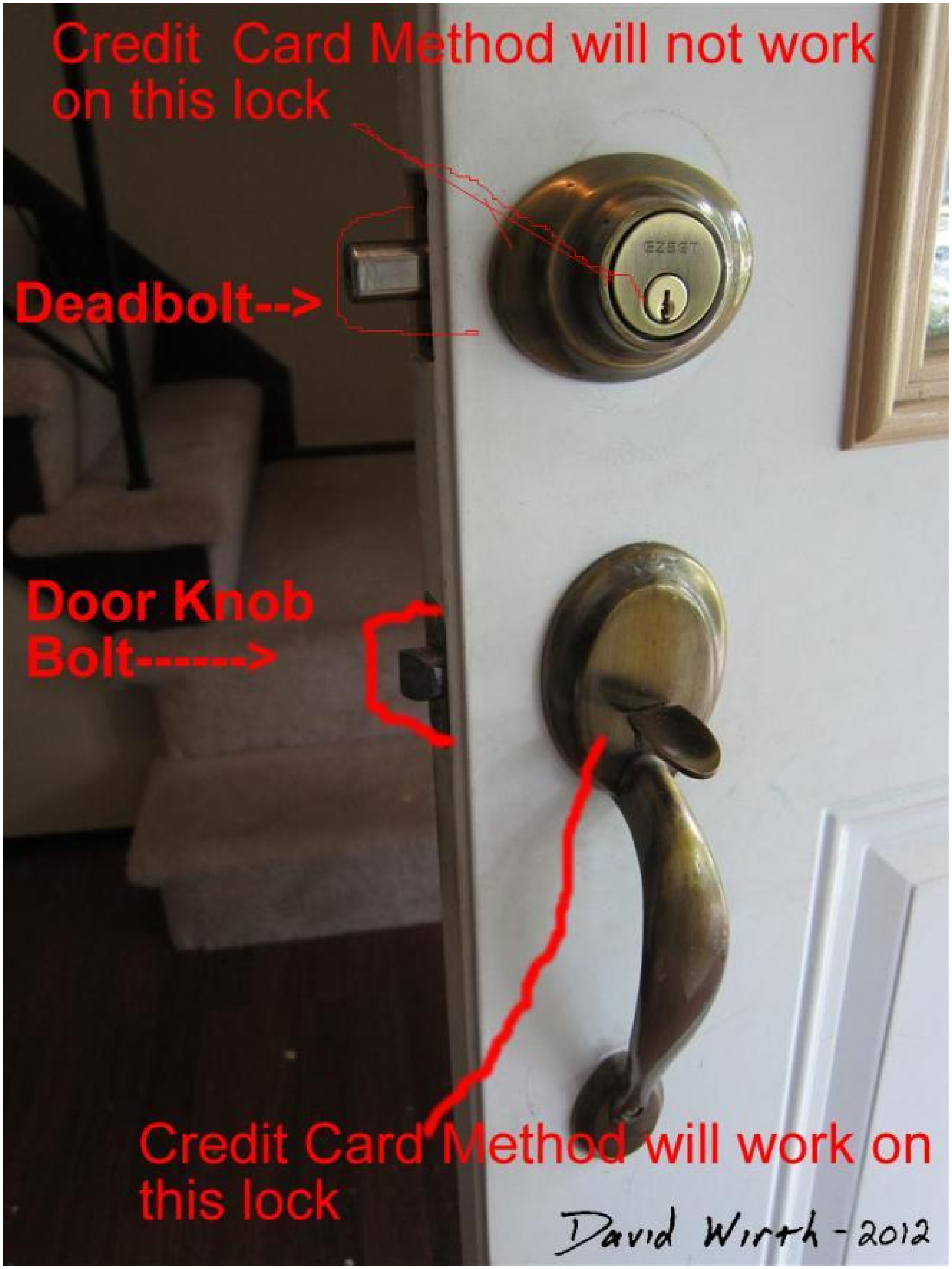
Start with the first pin, push it up while exerting light pressure with the tension wrench remember, exert pressure with the wrench in the direction that the lock will open when the driving pin has been pinned between the plug and the shaft, you will feel that the plug rotates slightly. To prove that you have that first pin in the correct position, release the tension on the torsion wrench and you should hear a click that means that that pin was picked correctly. Now pick it again and do the same with each pin until the plug turns and the lock opens.



Opening a door using a credit card:

Some doors can be opened by using a credit card type plastic card, we do not recommend using a valid credit card for this purpose unless is an emergency because the card will get damaged in the process, use an expired card or any other slim plastic card of the same shape.

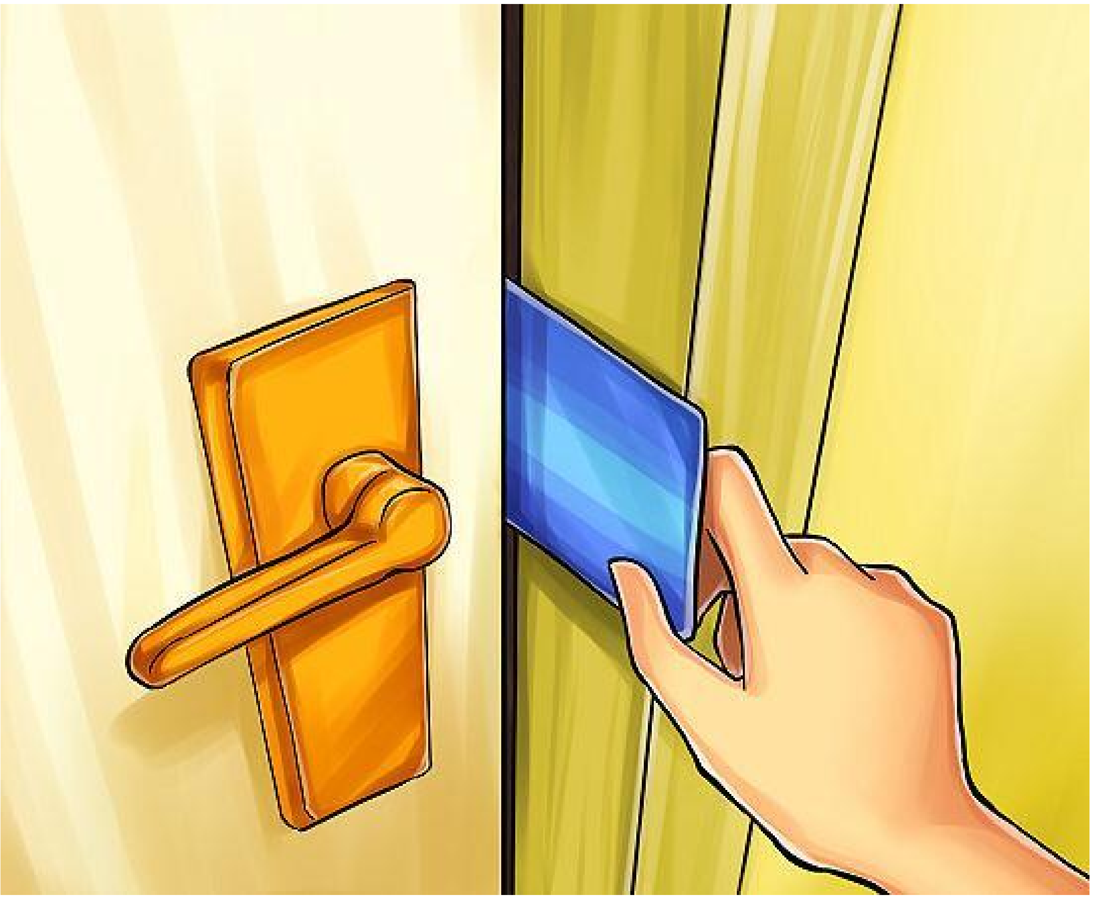
The doors that can be opened with a credit card must not be equipped with a deadbolt as this method will not work on those but only on the door knob type of lock.


Credit Card Method will not work on this lock
Deadbolt-->
Door Knob Bolt------>
Credit Card Method will work on this lock
EZSET

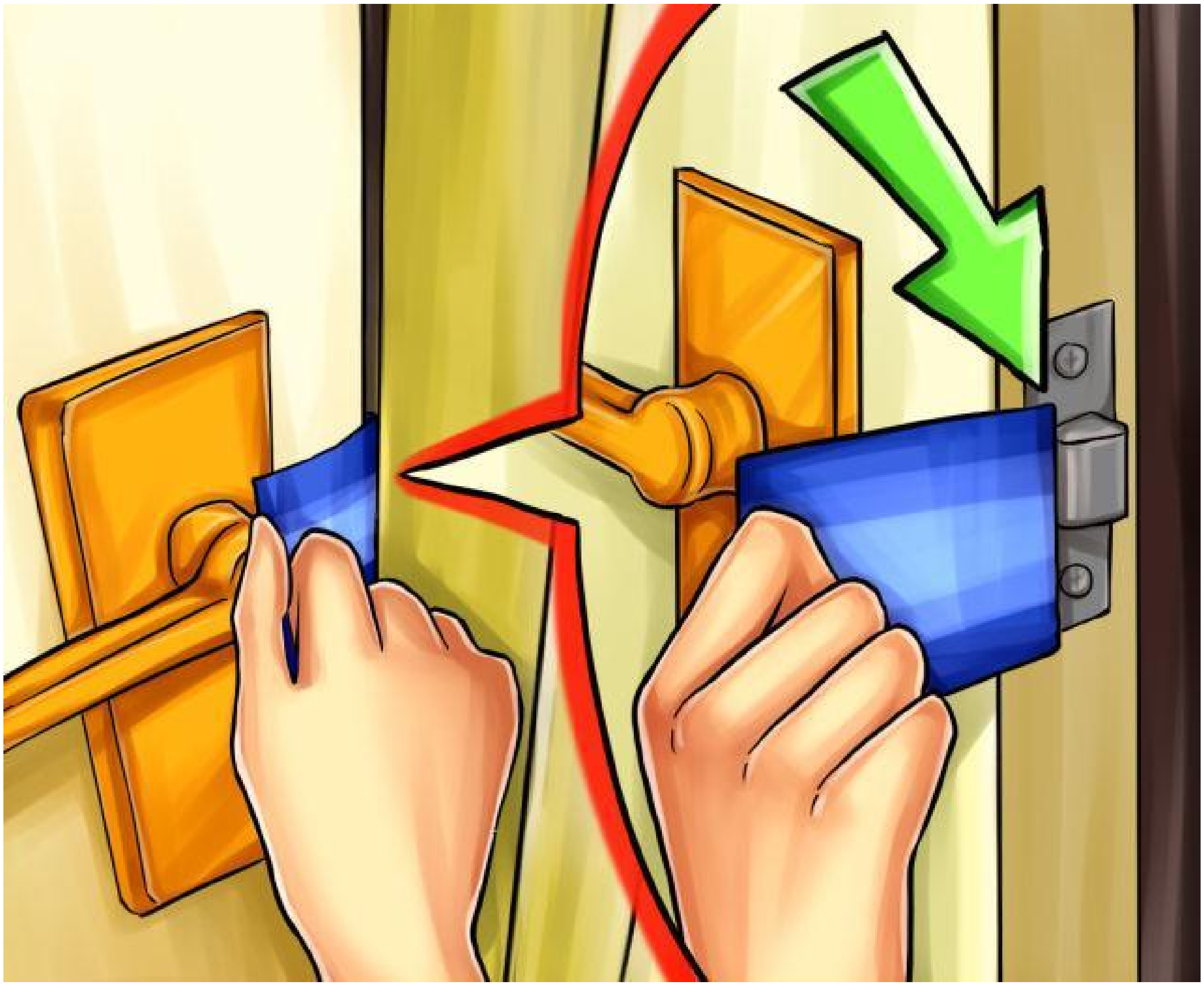
David Wirth - 2012

Credit card method will work on door knob locks but not on deadbolt locks.
The first thing to do is to jiggle the door knob to see if the door was dead bolted or just locked by the door knob bolt on the way out, if it is locked by the door knob, it will not turn. The door may still be dead bolted but you still need to open the door knob lock.

Check the Door
Now take your card and slide it from the top down the crack of the door until you feel the card touches the lock bolt.

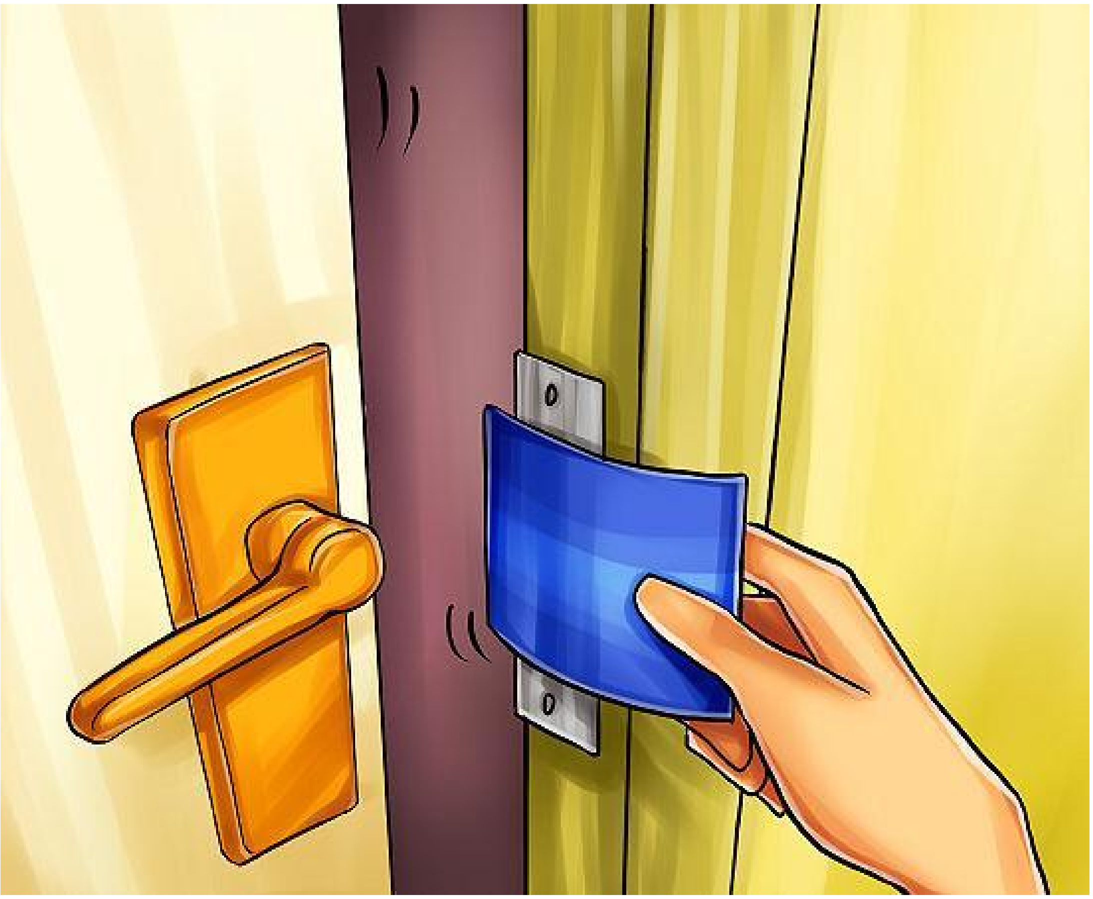


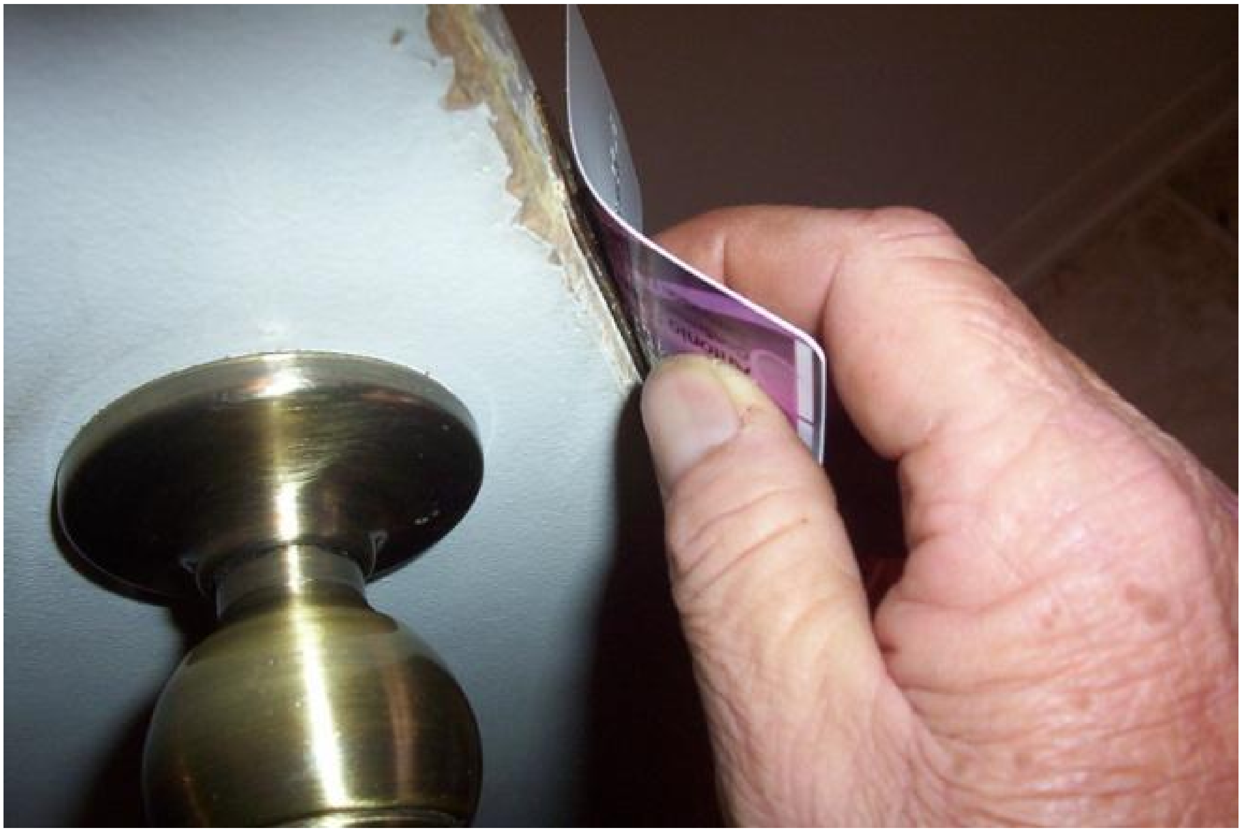
Insert the card on the between the door and the Jam and slide down until it meets the lock bolt.
Then wiggle the card in a downward motion while pushing and pulling the door knob to slide the card between the lock bolt and the door frame.



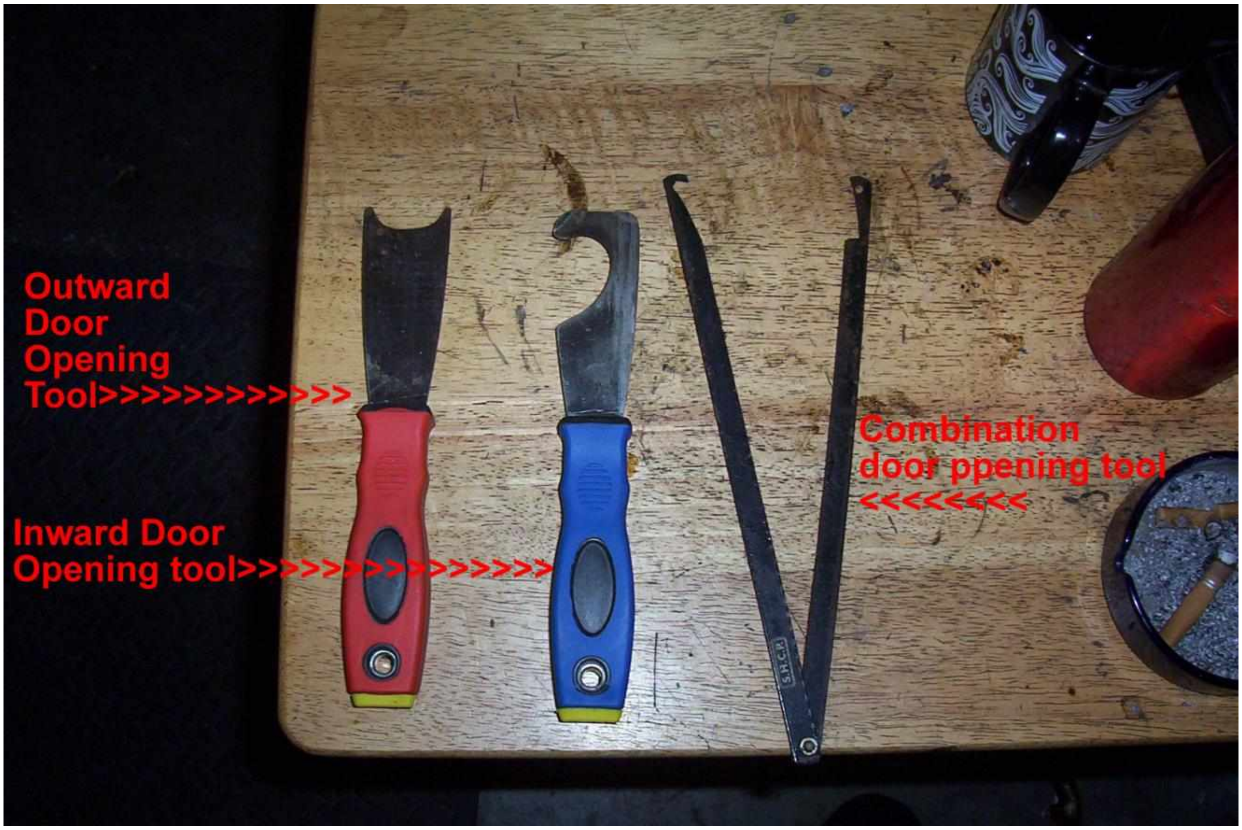
Wiggle the card down between the lock bolt and the door Frame.

Once you have the card between the bolt and the door frame bend your end of the card towards the frame to push the bolt inside the lock and pull and then push to open the door.

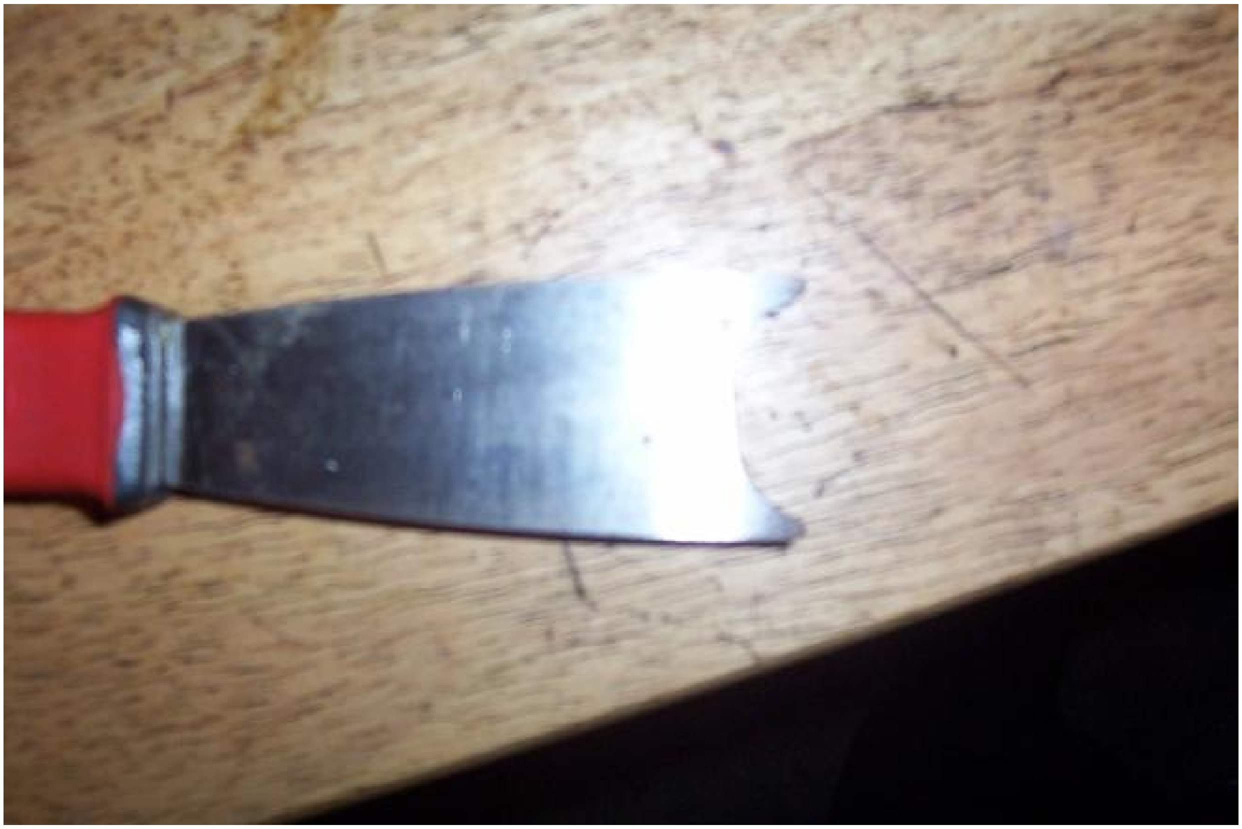




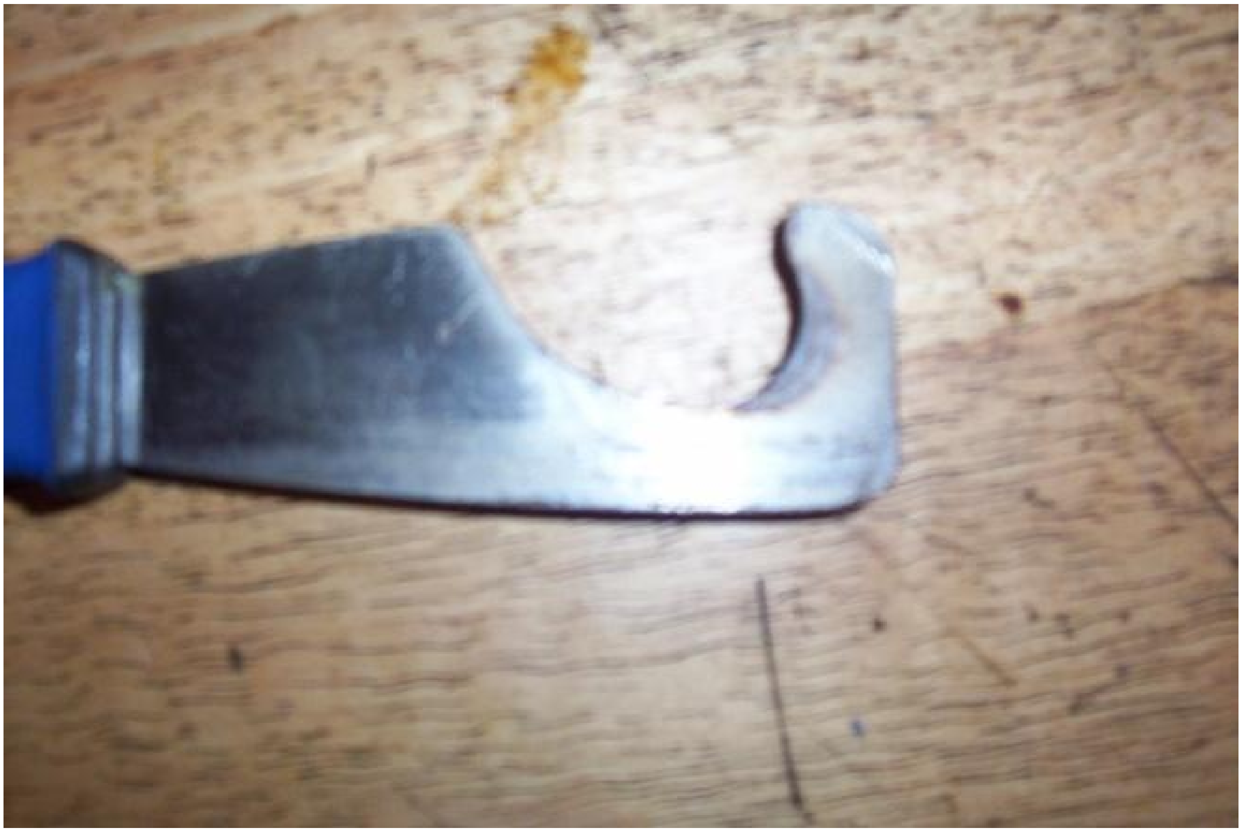
This method works well on doors the open inwards, for door that open outwards the method varies slightly because the door bolt is reversed,
I have developed a set of tool that will open both doors that open inwards and outwards, and you can make those tools yourself using very inexpensive materials.


Outward Door Opening Tool>>>>>>>>>>>>
Inward Door Opening tool>>>>>>>>>>>>>>>
Combination door ppening tool <<<<<<<<
S.H.C.P.

This tool will open outward opening doors with the credit card method but I have used an inexpensive spatula and cut it in order to insert it where the lock bolt is located and then pushing on the tool to open the door.

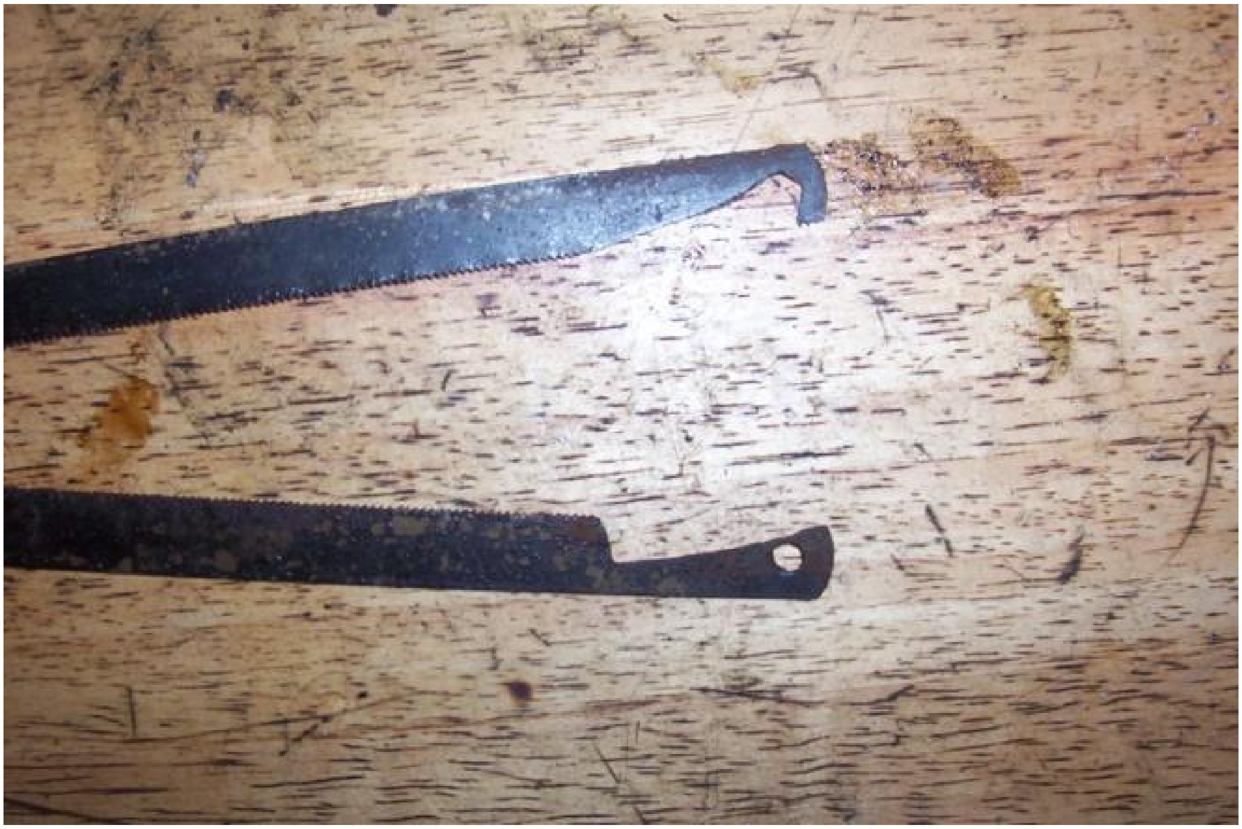


Tool for Outward door opening This other tool is for opening inward opening doors, it is use much like the credit card by sliding the tool over the lock bolt and then twisting the tool while pulling and pushing.



Tool for Inward door opening

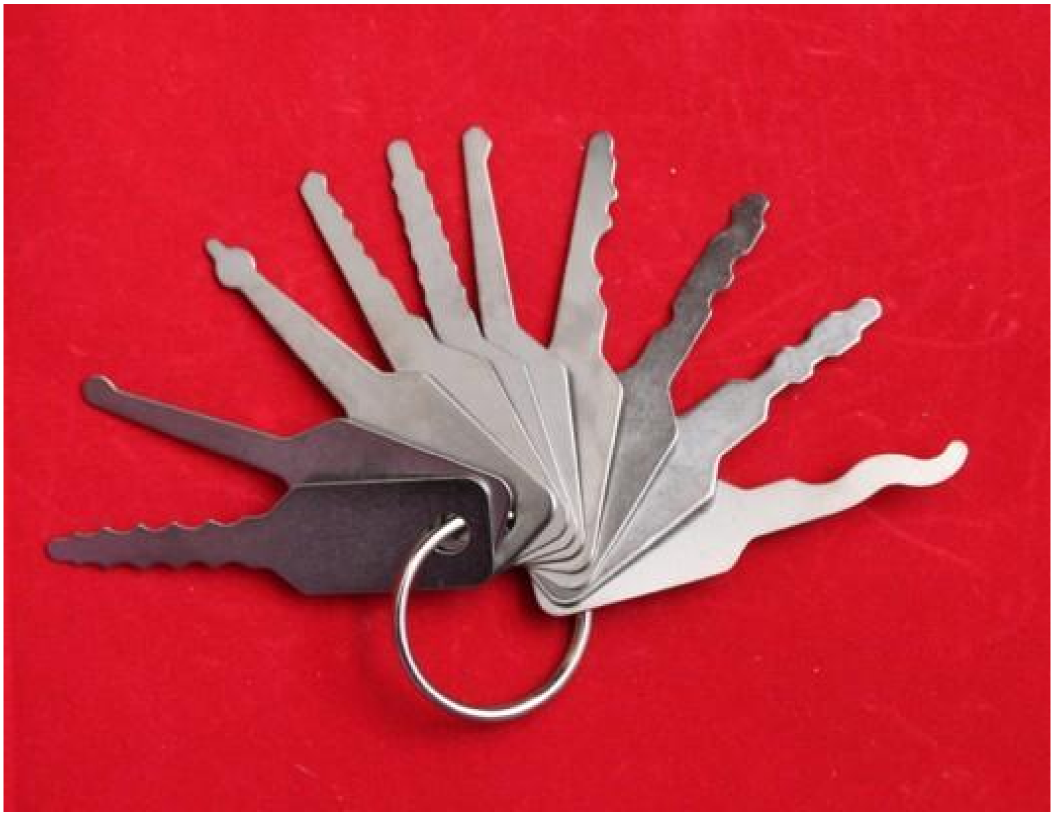
This tool will open both types of doors and it was constructed with two hack saw bladed that when joined together will clamp over the lock bolt and will open the door by pushing or pulling.



Opens both types of doors

Auto Jigglers or try out keys:

As promised in the previous chapter we will now explain how to use Auto Jigglers or try out keys as they are called sometimes to open car doors.



Try-Out keys are a set of lock picks designed for opening car doors they work best on automobiles from 1999 and older.

To use these picks correctly you must find the tool that most likely resembles the actual car key, but since most of the time you don’t have the actual key you must “Try-Out” all of the tools until you find the one that works, hence the popular name for these picks.

The instructions issued by the manufacturer state that you should hold the tool between the thumb and the forefinger and apply turning pressure clockwise or anti-clockwise while jiggling the tool in and out of the lock in a raking motion but when first tried this method seemed a bit awkward so I developed my own method using a Forked Torsion wrench to apply the tension while concentrating on the raking in and out of the tool.

To speed up the opening process you may want to combine the procedure above with a little rocking action to increase the chances of success.

Well, there you go, all that you wanted to know about lock picking but were afraid to ask.

We hope that you use the skills you now posses to help others in their time of need, there is no worse feeling than being locked out of your own home or car.

Note: We hope that you take advantage of the given instruction on how to make your own tools provided in this book, but if you rather purchase your tools rather than make them yourself, everything needed by the amateur or professional locksmith is available at:

Master Locksmith Supplies:
http://www.asmorejon.ws/Locksmith_Supplies